ORIGINAL ARTICLE

Evaluating a cognitive/behavioural approach to teaching anger management skills to adults with learning disabilities

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Summary

The present paper describes an intervention based upon a cognitive/behavioural teaching approach with a group of five adults with learning disabilities. The intervention addresses a number of issues raised by other authors regarding the implementation of such programmes. These issues are described and a plan explaining the main elements of the training course is included. The findings made during implementation are discussed and a number of points raised by the intervention are considered. The present authors conclude with their hope that this work will encourage further research into the use of cognitive behavioural interventions with people with learning disabilities.

Introduction

It has only been over the past 15 years or so that the subject of teaching people with learning disabilities to control their own anger has received any attention in either clinical practice or the academic literature. However, as noted by Whitaker (1993), the research into this area is limited. Of the work reviewed in the literature, only a small number of interventions included cognitive self-management training, whilst the majority of studies into anger and aggression were found to focus on external management through punishment, contingencies and reinforcement schedules.

A number of observations are made by Whitaker (1993) in his review regarding research into cognitive behavioural interventions. These observations, along with cautions cited by other authors, have informed the present study, which subsequently aims to address some of these issues. Firstly, Whitaker (1993) noted that very few research articles into all interventions directed at reducing aggression and managing anger have focused upon groups or individuals living within community settings. Similarly, in more recent studies, the clients involved in training in anger management programmes have often been within institutional settings. For instance, Lindsay *et al.* (1998) described an intervention with a range of clients who were resident at a special unit at the time of their study. Furthermore, Rossiter *et al.* (1998) reported on an intervention with a group of people, over half of whom were in residential rather than community settings. When considering that the majority of people with learning disabilities do not live in institutional settings, it is clear that more research with clients living in the community is required.

Secondly, the majority of studies into cognitive/behavioural anger-management programmes have included direct care staff in support of clients during sessions. This leads to a concern regarding any outcome measures because, by becoming more aware of the triggers which provoke anger for the client with whom they work, staff may become more skilled at managing and avoiding these triggers. Thus, the improved abilities of staff in defusing situations may account for a reduction in frequency of incidents, rather than the reduction being a result of the teaching of self-management techniques to the client (Rose 1996).

Thirdly, a feature of some studies has been that of screening prospective clients for group-based anger management interventions prior to acceptance for treatment. Since Benson

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et al.'s (1986) screening interview, other studies have followed this process of screening (e.g. Rossiter *et al.* 1998). The concern regarding this approach is that, because the particular focus of this screening is on being able to talk about feelings and emotions, intervention programmes may be failing to address deficits known to be correlated with high levels of aggression. This includes deficits particularly recognized in children, such as difficulties with the affect labelling process, i.e. difficulties in recognizing and naming feelings and emotions experienced (Garrison & Stolberg 1983), which can be incorporated into and addressed by the training programme.

Finally, the majority of studies which have focused upon teaching self-management techniques have relied on relaxation alone, or relaxation in combination with self-monitoring and self-instruction (Hughes & Davis 1980; Cole *et al.* 1985; McPhail & Chamove 1989; Rossiter *et al.* 1998). The only other form of training in addition to these has been in teaching adapted versions of Novaco's (1978) social problem solving (e.g. Benson *et al.* 1986) or assertiveness training (e.g. Walker & Cheseldine 1997). In the present paper, the authors describe their attempts to implement a comprehensive intervention which incorporates additional features. These include developing basic skills such as recognizing anger arousal at an early stage, and attending to cues to recognize the moods and intentions of others more accurately, along with more complex functionally equivalent skills to deal with situations effectively.

With these observations in mind, the present study aims to address the issues raised above and build upon the body of research which is gradually informing cognitive behavioural intervention strategies for people with learning disabilities.

Method

Choice of participants

All clients who participated in the group were referred to a clinical psychology department because of difficulties in managing their anger. No screening process took place in the selection of the group, with clients referred for difficulties with aggression offered the opportunity of joining the training programme. Five people chose to join the group: three males and two females; mean age = 33 years; and age range = 25–49 years.

All clients had received individual sessions with the second and third authors (C.R. and S.W.) which focused on teaching relaxation techniques, and in two cases, individual counselling unrelated to anger management. This work had been carried out for between 5 and 18 months (mean = 8 months), and it was felt that the relaxation techniques alone were insufficient to assist the clients to develop full control of their own aggression.

Participants

Participant 1 was a 32-year-old female diagnosed as having a mild learning disability [Weschler Adult Intelligence Scale – Revised (WAIS-R, IQ = 62] who was living in her own home with minimal support. She had been referred to the authors' clinical psychology department in 1997 for a 'long standing history of generalized anxiety symptoms and depression' and was reported to have difficulties controlling her verbal aggression. During the programme, participant 1 received Lorazepam and Thioridazine to control the anxiety and verbal aggression.

Participant 2 was a 28-year-old male diagnosed as having a moderate/mild learning disability (WAIS-R, IQ = 57) living in shared accommodation with two other people and full-time support. He had been known to psychology services since 1990, when he was admitted to a long-stay hospital after committing a sexual assault. The recent involvement of the clinical psychology department was a result of reports of frequent outbursts of verbal aggression and damage to property.

Participant 3 was a 49-year-old female with a mild learning disability (WAIS-R, IQ 62) living in a house with two other people and full-time support. She was referred to the clinical psychology department because of frequent verbal aggression, which was directed towards staff and other people whom she shared her home with. At the time of intervention, participant 3 was receiving Thioridazine to address anxiety and aggression.

Participant 4 was a 25-year-old male diagnosed as having a mild learning disability (WAIS-R, IQ 69) living with minimal support in his own flat during the first half of the programme; however, because of frequent break-ins to his flat, he moved into temporary full-time support. He was referred to the clinical psychology department following a conviction for assault, and presented with infrequent but significant physical aggression.

Participant 5 was a 33-year-old male, diagnosed on Raven's Matrices as having a mild learning disability, who was living at home with his elderly parents and a sibling. He was receiving minimal project worker support following the loss of his day placement after being convicted of an assault on a support worker. Participant 5 presented with verbal aggression, and infrequent but significant physical aggression and damage to property. In the 18 months leading up to the intervention, participant 5 had been convicted of assault on two separate occasions.

Procedure

The group met for 2 h at a regular time on a weekly basis for a total of 12 sessions. A break of 6 weeks occurred between sessions 6 and 7 in order to accommodate group facilitators' and participants' holidays.

The course was divided into two specific units of six sessions each. The first of these units covered: teaching participants to recognize feelings and emotions in others; identifying the physical and psychological signs of anger arousal in themselves; becoming aware of cognitive triggers to anger; developing a consideration of alternative thoughts and attributions for the actions of others; and learning an appreciation of the highly likely, personal consequences of losing control.

This element of the course was based upon research into aggression, in particular the socio-cognitive model of anger arousal proposed by Lochman (1984), and associated factors found in adolescents who display high levels of aggression, and used adapted cognitive interventions, such as recognizing thoughts which increase anger and learning to think thoughts more likely to have a calming effect. These approaches were obtained from work carried out by Feindler (1991), Lochman *et al.* (1991), Feindler & Ecton (1986) and Novaco (1978), along with some adapted resources from Nottinghamshire Probation Service's *Targets for Change* (Marshall 1991).

Of particular interest was research into the associated factors, which included: distortions in the affect labelling process (Garrison & Stolberg 1983); tendencies to perceive other people's intentions as hostile (Dodge *et al.* 1986); lack of inhibitory or self-control statements (Fiendler 1991); and the associated belief that aggression was a legitimate response (Slaby & Guerra 1988).

The second element dealt with teaching functional alternatives to that of using physical or verbal aggression to enable clients to deal with disputes and problems in a more effective and appropriate way. This included teaching participants negotiation and verbal assertion skills, the absence of which is correlated with higher levels of aggression (Deluty 1981; Brion-Meisels & Selman 1984; Asernow & Callan 1985; Lochman & Lampron 1986) and teaching a process of social problem solving (Novaco 1978), adapted for use as a tool for forward planning when situations had to be faced which clients had identified as likely to provoke anger.

In addition to direct teaching, the course utilized participant exercises, including role play, performed by both facilitators and clients, and video-based work, using both feedback from role plays and excerpts from popular soap operas. Unlike Lindsay *et al.* (1998), the soap opera excerpts were used in the session to identify emotions and feelings in others rather than for social problem solving. Details of each session are given in Table 1.

Given the mixed ability of the group, two of the participants received additional support from the second author (C.R.) on an individual basis between sessions. This took the form of working through prepared assignment sheets based on the main areas which the previous session had covered. This was designed to allow the two participants (i.e. numbers 2 and 3) receiving this extra support to attend the next session with an understanding sufficient to allow them to engage on an equal basis with the rest of the group.

The group was facilitated by the three authors with, the first (P.M.H.) leading the sessions, whilst the other two were able to offer additional support in the form of further explanation to participants on any areas which they were finding difficult, and encouragement to voice their comments and opinions. All facilitators took part in role play, video work and exercises.

Measurement

A range of measures where taken to help provide the authors with some indication of the clinical effectiveness of this approach.

Attempts were made to collect frequency data. However, owing to difficulties with having to employ a number of methods to collect these data and some concerns regarding the reliability of some third-party reports, these data are not included.

Two rating scales, the Rosenberg Self-esteem Inventory (Rosenberg 1979) and the Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith 1983) were used on an individual basis by the second and third authors (C.R. and S.W.) before the intervention, at the midpoint and post-intervention. The scoring for the Rosenberg Self-esteem Inventory was calculated by reversing the scoring for the positive statements [i.e. from (4) strongly agree to (1) strongly disagree], whilst correct order scoring the negative statements and adding together the score for each statement. Only the anxiety ratings were considered on the HADS (Zigmond & Snaith 1983) given an assumed link between high levels of anxiety and increased potential for aggressive responding. The results of these rating scales are presented in Tables 2 and 3.

Self-monitoring through the use of simple mood thermometers was introduced 2 weeks before intervention and for 2 weeks post-intervention. Owing to inconsistencies in the self-recording, these measures are not included.

Qualitative data were collected through a semi-structured interview with the participants as a group post-intervention. This involved asking participants questions regarding the use of any techniques covered during the course, asking what participants had found helpful or unhelpful in the content of the course, and specific questions on how able participants felt in controlling their own anger.

Results

The interviews indicated that all participants felt more in control of their own anger. In the case of three participants (numbers 2, 3 and 4), they were able to relate specific

Table 1 Details of the aim and content of each session

Session	Aim	Content
1	Assess understanding, increase awareness of types of feelings and emotions, and increase the known labels for these moods	Introduction to group/warm-up: 'Talk about your favourite TV programme' Brainstorming exercise to identify different words for feelings and emotions Identify opposites
2 & 3	Recognition of emotional states in others	Activity 1: Facilitator picks card depicting an emotion and acts it out, group guesses; repeated, with participants acting. Activity 2: Video followed by question and answers, 'How do they feel?' and 'How can you tell?' Guidance on body language
4	Recognizing and identifying the signs of personal anger arousal	Completion of inventory on physical signs experienced. Introduce a model illustrating anger arousal, based on a graph with points indicating a normal level of arousal, a trigger, build-up, loss of temper, recovery and depression stages
5	Identifying external and cognitive triggers for anger arousal	Brainstorming: 'What makes me angry?' Introduction of ABC analysis of incidents. Introduce idea of red and green thoughts Exercise: identify if red or green thoughts, rephrase the red thought statements or identify alternatives which are green thoughts
6	Consequences of aggression and loss of temper	ABC revisited: Exercise to identify if positive or negative outcomes are likely Added several real life incidents of loss of temper from current news stories (notably David Beckham's sending off in the World Cup) and the consequences of the person's actions
7	Verbal assertion skills	Review of the past 6 weeks presented as a quiz Description of assertive, passive and aggressive statements Discriminating between passive, aggressive and assertive statements Identify which statements are assertive, aggressive and passive from those read out loud Rules of 'I language' and effectively saying 'no'
8	Verbal assertiveness practice	Role play exercises/video work/feedback on video
9	Negotiation skills	Introduction to the rules of negotiation Practice in finding compromises for hypothetical situations of dispute Role play exercises
10	Social problem solving for forward planning	Introduction to a simple framework for problem solving. Identify: (a) the problem; (b) what could be done; (c) what will happen; and (d) which is the best solution. Exercise 1: Solving hypothetical situations Exercise 2: Solving real situations facing participants
11	Consolidation	Feedback from situations Role play all techniques/video feedback
12	Consolidation	Role play, review of skills and cognitive elements

Table 2 Rosenberg Self-Esteem Inventory (Rosenberg 1979)

	Time-point		
Participant	Pre-intervention	Mid-intervention	Post-intervention
P1	34	30	35
P2	35	35	36
P3	35	34	35
P4	17	17	18
P5	21	22	28

Table 3 Hospital Anxiety and Depression Scale (HADS) (Anxiety) (Zigmond & Snaith 1983)

Participant	Time-point		
	Pre-intervention	Mid-intervention	Post-intervention
P1	8	–*	7
P2	3	3	3
P3	14	14	15
P4	15	18	8
P5	12	11	9

* Data unavailable (missed appointment).

occasions when they had successfully used techniques covered in the course. The remaining participants said they felt confident that they could use the techniques if the need arose.

Discussion

Firstly, as can be seen from the measures taken and the brief illustration of the results, it has proved difficult to provide robust data to indicate any potential effect of the training. Whilst it was an intention of the present authors to gain some data on the clinical effectiveness of the intervention, difficulties with data collection have led to a limited set of measures being available. The difficulty involved in gaining reliable frequency measures for all types of aggression was particularly problematic in allowing a more comprehensive evaluation of effectiveness and it may be a difficulty associated with working with groups within community settings.

However, a number of interesting points were raised whilst planning and implementing the training course. Firstly, the level of understanding participants held and how this related to certain elements of the course provided interesting findings. Contrary to assumptions made in other studies, participants were able to understand and engage with complex elements of the course when presented in a simple format and repeatedly practised. With regard to the social problem-solving element, for instance, when used as a forward planning tool, all clients demonstrated their ability to comprehend and use it effectively. Similarly, in using new skills such as negotiation, when demonstrated and practised in 'real' situations during role play, all clients quickly grasped how to use the skills effectively.

Similarly, rather than concentrating upon teaching clients a single self-instruction which can be applied when becoming angry, the group were taught how to recognize and understand the cognitive processes involved in anger arousal. In particular, this covered how the way we perceive and think about the anger-provoking stimulus, and how we interpret the actions of others, can influence whether we get angry or not. It was felt that, by learning to recognize anger-provoking and anger-calming thoughts, and using the calming ones, clients would have a more effective strategy than single self-instructional statements. From the semi-structured interview, it was clear that all participants had gained the ability to discriminate between 'red' and 'green' thoughts, and formulate 'green' thoughts regarding situations which they encountered.

Another important finding from implementation was how repeated practice and role play became a central element of the training because these proved invaluable in assisting the participants to understand and use the techniques. Through the role play and practical exercises, the techniques and skills appeared to become easier for clients to understand and practise because these appeared to provide some context for the learning to take place.

Finally, a further point of note which came from both the evaluation and implementation of the course was the way in which clients appeared to have favoured particular elements of the course. In particular, this could be seen through the semi-structured interview where clients had used skills in real life which they had shown the greatest understanding of and ability to use in role-play situations during sessions. This finding is of interest because it gives weight to the argument for a training course teaching a wide range of skills and cognitive abilities when working with clients with anger control problems.

Overall, the experience of implementing this cognitive/behavioural, group-based intervention provided valuable experience within this relatively new area of working with people with learning disabilities. It is hoped that the work described in the present report may encourage further study into the field of cognitive behavioural interventions designed to assist people to develop the abilities to control their own anger.

Conclusion

Whilst it was difficult to collect measures rigorous enough to provide a quantitative evaluation of the intervention, the present authors have felt encouraged to repeat the course with other groups. This encouragement has come from the

experience of implementing the course, and from the participants' positive responses to the questions in the semi-structured interview and their overall impressions of the course. It is hoped that the lessons learned in implementing this first group of participants will allow a more rigorous clinical evaluation to be carried out over time by the authors and by others working within this area.

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