Reaching Out to Problem Anger: Assessing the Effectiveness of One-Day Cognitive Behavioural Workshops in a Community Setting in the UK

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ABSTRACT

**Background.** Problem anger is frequently experienced by the general population and is known to cause significant problems for the individual and those around them. Whilst psychological treatments for problem anger are becoming increasingly established, this is still an under-researched area of mental health. We present an evaluation of a series of one-day anger management workshops for the public, targeting problem anger with a cognitive-behavioural approach.

**Aims.** The main aim was to evaluate the effectiveness of a brief group-based anger intervention in terms of subjectively reported anger provocation levels and of depression and anxiety.

**Methods.** Workshop participants completed a number of questionnaire measures at baseline before the intervention and at 1 month follow-up. The key questionnaires measured self-reported anger provocation levels (Novaco Anger Scale-Provocation Inventory), depressive symptomatology (PHQ-9) and symptoms of generalised anxiety (GAD-7). Change scores were analysed using repeated measures analyses.

**Results.** We found a significant reduction in anger provocation among workshop participants at 1 month follow-up ($p = .03$). Reductions in depression and anxiety were not statistically significant.

**Conclusions.** We conclude that this brief psychoeducational anger intervention was effective in a small community sample and suggest future work should assess the effectiveness on similar
brief interventions using a larger client group and examine outcomes on a broader range of anger measures.

**KEYWORDS:** Problem anger; cognitive behavioural therapy; group therapy; workshop; community.

**INTRODUCTION**

Increasing evidence suggests that problem anger is linked to a variety of social, physical and mental health problems. In the UK, there are currently only a small number of anger management courses available, some offered by NHS services and some by voluntary organisations. As discussed in the ‘Boiling Point’ report on problem anger by the Mental Health Foundation (2008), there is a need to expand this provision, most likely through the ‘Improving Access to Psychological Therapies’ (IAPT) programme. In order to do this though, it is important that the effectiveness of existing services is first examined.

To our knowledge, the only currently published empirical evaluations from general adult mental health NHS services have come from one group in Southampton, UK, who report promising results: The first study is Bradbury and Clarke's (2006) evaluation of an anger management service, where clients were offered 12 weekly group CBT sessions that focussed primarily on arousal control. Data from one particular therapy group indicated that therapy completers ($n = 6$) saw significant improvements in anger control and self-esteem, but not anxiety or depression. The second study is a small-scale randomised controlled trial (RCT) of this same service, which reports similar findings in a larger group of 35 participants, only 10 of whom completed (28.6% completion rate) (Naeem, Clarke, & Kingdon, 2009).
With the exception of Bradbury and Clarke (2006) and Naeem et al.’s (2009) study, there is little evidence of the effectiveness of treatments for adults in the community experiencing problem anger without other more serious psychological difficulties in the UK. Moreover, there is a paucity of research examining the effectiveness of brief interventions in this client group.

The aim of this study was to fill this gap in the literature by providing preliminary evidence from a series of brief community one-day cognitive-behavioural anger interventions, which were designed to be accessible to the public. Given the existing evidence-base, we predicted that participants would experience a decrease in subjective anger provocation following treatment. Additionally, we predicted that successful treatment of anger may have positive effects on other psychopathology, such as depression and anxiety, via potential treatment generalisation effects.

METHODS

Setting. Southwark Psychological Therapies Service (SPTS) is an outpatient adult mental health service which is part of the government initiative, ‘Improving Access to Psychological Therapies’ (IAPT). The lack of service provision for problem anger had been observed, and a decision made to run a series of one-day workshops utilising evidence-based CBT principles, similar to other one-day workshops developed for depression (Brown et al., 2004). The workshop format was for up to 30 people.

Information Governance approval was granted for the service evaluation project by South London and Maudsley NHS Trust; thus ethical approval was not required, nor consent from participants for use of data due to anonymization.

Participants. There were 65 referrals (GP referrals and self-referrals) for the four workshops held over the course of 2011-2013. In total, 50 of these people (20 male, 29 female, and 1
unrecorded: *Mean age = 38.80, SD = 10.64* participated in both the introductory talks and workshops.

**Measures.** All participants were asked to provide demographic information and complete a set of standardised measures as part of the workshop (at initial referral/introductory talk, then repeated at the workshop and at follow-up). In order to test our hypotheses we focused our analysis on the following measures: the Novaco Anger Scale-Provocation Inventory (NAS-PI; Novaco, 1994); the Patient Health Questionnaire (PHQ-9), which is a brief depression questionnaire; and the Generalised Anxiety Disorder-7 (GAD-7), which measures symptoms of generalised anxiety.

**Intervention.** The workshops were held at a library that was conveniently located in the borough, and lasted 7 hours; each therapist adhered to a manual, allowing time for group discussion where appropriate. The first morning session consisted of psychoeducation explaining what anger was and introduced a CBT model of anger focusing on the mediating role of appraisals of triggers, and consideration of the different personal experiences of anger and their consequences. In the second session, participants were taught how to self-monitor their anger, and how to challenge anger related automatic thoughts. In the afternoon, several other practical strategies were taught, including avoidance of anger triggers or situations; relaxation techniques; problem solving; and assertiveness techniques. Following a summary of the day, participants were given time to set their own goals to be achieved over the following month.

**Statistical analysis.** Paired samples t-tests were computed to assess differences in outcomes between baseline and one month follow-up. Alpha was set at $p < .05$ two-tailed throughout.

**RESULTS**
Table 1 displays outcome data for workshop participants. Data is reported for just over 40% of participants. The reduction in numbers of participant data from baseline (T1) to follow-up (T2) reflect the fact that many participants failed to complete the follow-up questionnaires.

The PHQ-9 and GAD-7 initial baseline scores are both just below clinical cut-off (10 and 8, respectively), indicating the group was not clinically anxious or depressed. Participants scored in the average range on anger provocation, as measured by the NAI-PI.

**INSERT TABLE 1 ABOUT HERE**

Paired-samples t-tests were used to assess the efficacy of the workshop intervention as presented in Table 1.

Anger was our key outcome measure, and in line with our hypothesis, the scores on the NAS-PI were found to decrease significantly between baseline and follow-up: \( t(12) = 2.44, \ p = .03 \). A moderate effect size \( (d = 0.62) \) was found. This indicates that following the workshop, 43% \( (n=13) \) of participants on average reported significantly lower levels of anger provocation, with T2 scores falling into the below-average range. We also predicted decreases in mood and anxiety measures; although mean scores reduced following the intervention, the differences were non-significant for depression (PHQ-9: \( t(18) = 1.51, \ p = .16 \)) and anxiety (GAD-7: \( t(18) = 1.72, \ p = .10 \)). This is probably unsurprising given baseline scores were below cut-off.

Finally, given that a number of clients failed to complete the follow-up measures, we checked whether there were any differences at baseline between completers and non-completers. We found no differences in anxiety, depression or anger between these two groups at baseline \( (p > .46) \).

**DISCUSSION**
This study evaluated the effectiveness of a series of one-day community-based CBT anger workshops provided by a South London IAPT service. The workshops were found to be effective in reducing participants’ self-reported level of anger provocation. Depression and anxiety levels were not in the clinical range in our group and significant reductions were not found in these measures. Our findings add to the emerging literature on psychological treatment of anger and also to the evidence around the effectiveness of brief one-day cognitive-behavioural interventions (Brown et al., 2004). We found a moderate uncontrolled effect size ($d=0.62$) which is consistent with the findings of other meta-analyses (e.g. Saini, 2009).

Our results showed that there was no significant treatment generalisation beyond anger to depression and anxiety symptoms. Although a reduction in such scores has been found in previous studies (e.g. Gerzina & Drummond, 2000) it is likely that methodological differences and heterogeneity of samples across these has created some variability in findings. For example, although the present workshops lasted for about seven hours, other studies lasted longer and had more sessions, which may afford the opportunity to focus on practising therapeutic skills in-between each week. It is also possible that treatment generalisation is more likely in the context of more severe difficulties with anxiety and depression; our sample were below clinical cut-off at baseline.

**Limitations.** Principally, we acknowledge that our follow-up analysis is based on a small dataset of approximately 40% of the initial sample, although the attrition rates from other studies would suggest this rate is not uncommon, and superior to rates found in some studies (Naeem et al., 2009).

Adding further outcome data with longer follow-ups would be beneficial, as would a randomised controlled trial as performed by Naeem et al. (2009) in their small-scale trial of a similar treatment.
Conclusions. Our preliminary findings suggest that a brief, one-day intervention can provide meaningful help to reasonably large groups of people in the community specifically to help with problem anger. This initial evidence for the efficacy of a brief CBT approach would be enhanced by dissemination of data from similar services.

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CONFLICT OF INTEREST

None.

REFERENCES


