



A preliminary evaluation of cognitive-behaviour therapy for clinical perfectionism: A case series

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Objective. The construct of 'clinical perfectionism' has been developed in response to criticisms that other approaches have failed to yield advances in the treatment of the type of self-oriented perfectionism that poses a clinical problem. The primary aim of this study was to conduct a preliminary investigation into the efficacy of a theory-driven, cognitive-behavioural intervention for 'clinical perfectionism'.

Design. A multiple baseline single case series design was used.

Method. A specific, 10-session cognitive-behavioural intervention to address clinical perfectionism in eating disorders was adapted to allow its use in nine patients referred with a range of axis I disorders and clinical perfectionism.

Results. The intervention led to clinically significant improvements in self-referential perfectionism from pretreatment to follow-up for six of the nine participants on two perfectionism measures and for three of the nine participants on the measure of clinical perfectionism. Statistically significant improvements from pre- to post-intervention for the group as a whole were found on all three measures. The improvements were maintained at follow-up.

Conclusions. The finding that clinical perfectionism is improved in the majority of participants is particularly encouraging given that perfectionism has traditionally been viewed as a personality characteristic resistant to change. These preliminary findings warrant replication in a larger study.

Perfectionism can be a significant clinical problem interfering with a person's functioning in everyday life (Burns, 1980). It is associated with a range of psychopathology, including depression, anxiety and suicidality (Flett & Hewitt, 2002) and has been implicated in the maintenance of eating disorders (Fairburn, Cooper, & Shafran, 2003). Furthermore, perfectionism has been shown to impede the successful treatment of depression (Blatt, Zuroff, Bondi, Sanislow, & Pilkonis, 1998). Bieling *et al.* (2004) have recently reported that certain dimensions of perfectionism predict higher

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levels of axis I disorder comorbidity, even after controlling for current symptoms and suggest that treating perfectionism directly might produce greater symptom relief than treating specific symptoms or disorders sequentially.

A fundamental difficulty with the suggestion of Bieling *et al.* (2004) is that there are no established treatments for perfectionism. To date, there have been individual case studies (e.g. Hirsch & Hayward, 1998) and two case series (Barrow & Moore, 1983; Ferguson & Rodway, 1994). The case study of Hirsch and Hayward (1998) was particularly rich in clinical detail, but the efficacy of the intervention in other patients has not been evaluated. The two case series (Barrow & Moore, 1983; Ferguson & Rodway, 1994) were limited by a lack of clear theoretical basis for the intervention, failure to define axis I disorder symptomatology in the sample and lack of a treatment manual. In addition, although manuals for the treatment of perfectionism have been produced (e.g. Antony & Swinson, 1998), they have not yet been systematically evaluated.

It was in response to the lack of an empirically grounded treatment for perfectionism that a new cognitive-behavioural model of 'clinical perfectionism' was developed (Shafran, Cooper, & Fairburn, 2002). Clinical perfectionism is defined as 'the overdependence of self-evaluation on the determined pursuit (and achievement) of self-imposed, personally demanding, standards of performance in at least one salient domain, despite the occurrence of adverse consequences' (Shafran *et al.*, 2002, p. 773). At present, the model of clinical perfectionism is largely speculative (see Riley & Shafran, 2005, for some preliminary qualitative data), but it is proposed that perfectionism is maintained by mechanisms including extreme standards (operationalized as rigid rules), behaviours such as avoidance and repeated assessment of performance, cognitive biases including dichotomous thinking and selective attention to failure, and the raising of standards if they are achieved. Clinical perfectionism is a circumscribed clinical construct and is much narrower than the construct of multidimensional perfectionism (e.g. Hewitt & Flett, 2002). Clinical perfectionism refers exclusively to the self-oriented perfectionism that causes significant problems for the individual. It is the overdependence of self-evaluation on performance that is regarded as the core psychopathology of clinical perfectionism and which turns what could be functional high standards into dysfunctional perfectionism. Some support for this view comes from a recent study (Dunkley, Blankstein, Masheb, & Grilo, 2006), which found that self-critical evaluative tendencies were a better predictor of psychiatric disorder than high personal standards.

Based on treatment developments in the field of anxiety disorders and bulimia nervosa, Shafran *et al.* (2003) argue that an emphasis on maintaining mechanisms is more likely to lead to the successful treatment of psychopathology than interventions which do not have a clear theory and testable hypotheses (Clark, 2004). An intervention for clinical perfectionism has been developed, based on the factors hypothesised by Shafran *et al.* (2002) to maintain clinical perfectionism. It has been derived primarily from work with patients with eating disorders (Fairburn *et al.*, 2003) and utilizes cognitive-behavioural strategies. The intervention developed for clinical perfectionism is relatively brief, consisting of approximately 10 50-minute sessions. The impact of the intervention in a patient with binge eating disorder has been described in a recent single case study (Shafran, Lee, & Fairburn, 2004). Improvements in clinical perfectionism and eating disorder psychopathology were found over an eight-session intervention and were largely maintained at 5-month follow-up.

The results from this single case study were of particular interest since perfectionism has traditionally been regarded as a stable personality trait, and as such, as rather intractable. Furthermore, the likelihood of meaningful and sustainable benefit from a brief intervention focused on maintaining mechanisms has been questioned by Hewitt and colleagues (Hewitt, Flett, Besser, Sherry, & McGee, 2003). These authors have criticized the focus of the construct of clinical perfectionism on self-focused perfectionism and its link with self-evaluation, and suggested that the treatment model derived from such an analysis would be 'directed more toward temporary relief than a treatment model oriented around lasting change' (p. 1232). They suggest that for treatment to produce lasting change, then interpersonal aspects of perfectionism need to be considered by including a 'schema-focused phase' in which 'enduring, depth-level schemas based on interpersonal patterns, developmental origins, and traumatic experiences' are addressed (p. 1232).

The goal of this study was to provide a preliminary evaluation of a brief intervention of clinical perfectionism to determine whether it was able to produce any meaningful change and whether such changes were maintained over time. The present study used a multiple-baseline, single case experimental design (Barlow & Hersen, 1984). This type of design is considered to be less subject to bias and more scientifically focused than traditional case studies (Hayes, 1981). It was hypothesized that this intervention would lead to significant improvements in clinical perfectionism and in associated psychopathology such as anxiety and depression.

Method

Design

This study used a case series methodology with an A-B design plus follow-up. Following an assessment to determine suitability for the study, all participants were assigned to a no-treatment baseline phase ranging from 6 to 43 days. Following the baseline phase, the treatment protocol of cognitive-behaviour therapy (CBT) for clinical perfectionism was delivered by DG under the supervision of RS. Participants were requested not to engage in psychological therapy immediately after the intervention, and they were then followed-up at 3 months.

Measures and materials

To assess perfectionism, the Multidimensional Perfectionism Scale (MPS-H; Hewitt & Flett, 1991), the perfectionism subscale of the dysfunctional attitude scale (DAS; Weissman & Beck, 1978), and the clinical perfectionism questionnaire (CPQ; Fairburn *et al.*, 2003) were administered. The MPS-H is a 45-item questionnaire assessing people's beliefs about the standards that they set for themselves (self-oriented perfectionism; MPS-SOP), the standards they set for others (other-oriented perfectionism; MPS-OOP) and the standards that they perceive others set for them (socially prescribed perfectionism; MPS-SPP). The dysfunctional attitude scale (Weissman & Beck, 1978) also assesses a construct somewhat broader than clinical perfectionism, in that it taps interpersonal dimensions of perfectionism as well as intrapersonal aspects. The DAS perfectionism subscale used in this study was based on the 14-item perfectionistic achievement factor identified by Beck *et al.* (1991). The CPQ (Fairburn *et al.*, 2003) is a 12-item measure of clinical perfectionism based on the model proposed by

Shafran *et al.* (2002). Its individual items assess the cognitive, behavioural and affective components of setting goals and striving towards them, and the consequences on the individual's self-evaluation when the standards are met or not met. Responses are rated on a four-point scale ranging from 'not at all' to 'all of the time'. It has a 4-week timeframe so is sensitive to clinical change. The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) and the Beck Anxiety Inventory (BAI; Beck, Epstein, Brown, & Steer, 1988) were also administered. All these measures, with the exception of the CPQ, have published evidence of good reliability and validity. Whilst the psychometric properties of the CPQ have yet to be established, preliminary analysis suggests that it has good reliability and validity (Riley, 2005). For example, the scale differentiates between clinical and nonclinical samples, is stable over a 2-week period and is correlated with clinician ratings of clinical perfectionism. Measures were administered at pre- and post-treatment and at 3-month follow-up. In addition, a set of visual analogue scales (VAS), based on the construct of clinical perfectionism, was completed by participants at four time points during the baseline phase, then at the start of each treatment session and at follow-up. Visual analogue scales can provide sensitive measures of subjective experience and have been shown to have good reliability and validity in a range of settings (McCormack, Horne, & Sheather, 1988). The VAS assessed a number of the putative maintaining mechanisms of clinical perfectionism: striving, fear of failure, overevaluation of performance, checking/avoidance, narrow interests, all-or-nothing thinking and selective attention. Participants responded by placing a cross on a 10-cm horizontal scale ranging from 'not at all' to 'totally' for each maintaining factor. The wording of the seven VAS items was as follows: 'How hard have you pushed yourself to meet your goals?' (striving); 'How afraid have you been that you might not reach your standards?' (fear of failure); 'To what extent have you judged yourself on the basis of your ability to achieve high standards?' (overevaluation of performance); 'How often have you checked how well you are doing at meeting your standards or avoided tests of your performance?' (checking/avoidance); 'How much have you missed out on things because of trying to meet your standards?' (narrow interests); 'How much has your thinking been 'black and white' (all-or-nothing)?' (all-or-nothing thinking); 'How often have you been noticing things you do well?' (selective attention).

Participants

Nine patients (seven female, two male) drawn from two National Health Service psychology outpatient departments were included in the case series. Their ages ranged from 23 to 45 years, with a mean of 33 years. Clinical psychologists from these departments were invited to refer people with a DSM-IV (American Psychiatric Association, 1994) diagnosis of depression and/or anxiety, which in their clinical opinion was being maintained by clinical perfectionism of sufficient severity that it was having a significant negative impact on the patients' functioning. Application of these criteria also led to the inclusion of participants with primary diagnoses of chronic fatigue syndrome and body dysmorphic disorder. Suitability for the research trial was determined using a semi-structured interview for clinical perfectionism (Riley & Shafran, 2005) and by looking at participants' scores on measures of perfectionism. All participants scored at least one standard deviation above the mean of a nonperfectionist, nonclinical population on the CPQ. Five of the participants (P2, P3, P5, P6 and P8) scored one standard deviation or more above the mean of a nonperfectionist clinical population on the perfectionism subscale of the DAS; no normative data were available

for a non-perfectionist, non-clinical population on this measure. Five participants (P2, P3, P5, P6 and P8) scored more than one standard deviation above the mean of Hewitt and Flett's (1991) non-clinical control sample on MPS-SOP and five participants (P2, P3, P6, P7 and P8) scored more than one standard deviation above the mean on MPS-SPP. None of the participants scored more than one standard deviation above the mean of the non-clinical control sample on MPS-OOP.

No patient dropped out of treatment, but treatment was terminated early for one participant (P7) following deterioration in his emotional state. All participants except P7 were asked to attend a 3-month follow-up interview; P2 and P3 did not attend, but returned their questionnaires.

Procedure

The treatment protocol used in this study was derived from Shafran *et al.*'s (2002) cognitive-behavioural analysis of clinical perfectionism and from Fairburn *et al.* (2003). The manualized protocol consisted of four components: (1) a personalized formulation in terms of clinical perfectionism; (2) broadening the patient's scheme for self-evaluation; (3) using behavioural experiments to test competing hypotheses; and (4) using cognitive-behavioural methods to address personal standards, self-criticism and cognitive biases that maintain clinical perfectionism.

A personalized formulation was carried out at the end of the assessment interview. This was intended to increase engagement in a client group with whom it has been found to be difficult to develop a good therapeutic alliance (Zuroff *et al.*, 2000). Based on work in bulimia nervosa (Agras, Walsh, Fairburn, Wilson, & Kraemer, 2000), the first six treatment sessions were biweekly and the remaining sessions were weekly, with a 2-week interval between the penultimate and final sessions. Participants received between 10 and 14 50-minute sessions. Participants were followed-up 3 months after the final session.

Training in the treatment protocol was provided prior to the start of the intervention. During the intervention, detailed session summaries were produced for all sessions; all sessions were audiotaped. All the tapes of four participants were rated for adherence to the protocol, using ratings based on those described in Agras *et al.* (2000).

Analysis

Results were analyzed at the group level using Friedman tests to determine whether there were differences between scores at pre-treatment, post-treatment and follow-up. Significant results were further analyzed using Wilcoxon signed ranks tests. At the individual level, clinically significant change was calculated for the CPQ and DAS using Jacobson and Truax's (1991) definition (c) (i.e. the degree to which the client's level of functioning subsequent to therapy places them closer to the mean of the functional population than it does to the mean of the dysfunctional population).

Results

Table 1 shows patients' pre-treatment, post-treatment and follow-up scores on the CPQ, the perfectionism subscale of the DAS, MPS-H, BDI-II and BAI. Some follow-up data are missing for P1, P2 and P3. Post-treatment and follow-up scores that represent a clinically significant improvement from pre-treatment are highlighted. On the CPQ, three

Table 1. Scores at pre-treatment, post-treatment, and follow-up for each participant

Measure	Assessment point	Participant								
		P1	P2	P3	P4	P5	P6	P7	P8	P9
CPQ	Pre	31	29	39	30	30	39	37	37	31
	Post	19	28	34	24	29	22	37	31	28
	Follow-up	28	27	35	25	23	23	–	32	24
DAS-perfectionistic achievement	Pre	67	77	72	60	76	70	63	77	57
	Post	52	68	65	42	62	50	64	73	46
	Follow-up	56	–	58	46	63	50	–	75	53
MPS-SOP	Pre	80	92	102	79	86	94	63	87	78
	Post	51	92	88	65	77	59	66	86	62
	Follow-up	64	–	79	62	75	71	–	89	60
MPS-OOP	Pre	69	38	38	43	44	55	32	68	65
	Post	50	51	43	40	47	27	27	71	48
	Follow-up	60	–	43	40	50	25	–	75	58
MPS-SPP	Pre	67	87	78	62	62	72	68	82	42
	Post	46	75	71	54	66	67	72	90	45
	Follow-up	59	–	65	57	62	52	–	85	42
BDI-II	Pre	2	25	45	21	33	19	41	11	28
	Post	4	22	24	10	22	9	50	15	16
	Follow-up	–	–	–	23	21	4	–	16	39
BAI	Pre	6	11	37	8	18	30	8	12	25
	Post	8	18	14	8	14	14	14	15	24
	Follow-up	30	5	19	16	10	13	–	19	43

Note. Scores representing clinically significant improvement are highlighted in bold and italics. Clinically significant improvement not calculated for MPS-OOP.

participants (P1, P4 and P6) showed clinically significant improvement from pre- to post-intervention; at follow-up, the clinically significant improvement had been maintained for P6, but not P1 or P4, and two other participants' (P5 and P9) scores reflected a clinically significant change from pre-intervention to follow-up. On the perfectionism subscale of the DAS, five participants (P1, P4, P5, P6 and P9) showed clinically significant improvement from pre- to post-intervention; this improvement was maintained at follow-up in four cases (P1, P4, P5 and P6). On MPS-SOP, five participants (P1, P4, P5, P6 and P9) showed clinically significant improvement from pre- to post-intervention, which was maintained at follow-up. On MPS-SPP, one participant (P1) showed a clinically significant improvement from pre- to post-intervention, and one participant (P6) showed clinically significant improvement from pre-intervention to follow-up.

Participants' scores on the clinical perfectionism visual analogue scales were analyzed visually. Trends towards improvement over the course of the intervention were seen for seven of the nine participants, the exceptions being P7 and P8. However, the baseline scores showed clear trends towards improvement for three participants (P2, P6 and P7).

On the BDI-II, three participants (P4, P6 and P9) showed clinically significant improvement from pre- to post-intervention, but this was maintained at follow-up for P6 only. None of the participants showed a clinically significant improvement on the BAI.

Increases in BDI-II and BAI scores at follow-up (in fact from pre-intervention levels) were seen for four participants (P1, P4, P8 and P9).

Analysis at the group level using Friedman tests showed a significant effect of assessment point for the CPQ ($\chi^2 = 12.25$, $df = 2$, $p = .002$), the perfectionism subscale of the DAS ($\chi^2 = 12.07$, $df = 2$, $p = .002$), and self-oriented perfectionism ($\chi^2 = 7.71$, $df = 2$, $p = .021$). There was no significant effect of assessment point for other-oriented perfectionism ($\chi^2 = 0.92$, $df = 2$, $p > .05$), socially prescribed perfectionism ($\chi^2 = 2.15$, $df = 2$, $p > .05$), the BAI ($\chi^2 = 0.452$, $df = 2$, $p > .05$) or the BDI-II ($\chi^2 = 1.20$, $df = 2$, $p > .05$). Further analysis of significant results using Wilcoxon signed ranks tests showed that there was a statistically significant improvement from pre-intervention to post-intervention for each of the CPQ ($Z = -2.53$, $N\text{-ties} = 1$, $p = .01$), the perfectionism subscale of the DAS ($Z = -2.52$, $N\text{-ties} = 0$, $p = .01$), and self-oriented perfectionism ($Z = -2.371$, $N\text{-ties} = 1$, $p = .02$), which was maintained at 3-month follow-up.

In total, 45 audiotapes were rated for adherence to the treatment protocol by two independent raters. Mean adherence was 5.69 ($SD = 0.82$) on a seven-point Likert scale ranging from 0 = poor/none to 7 = excellent.

Discussion

This study suggested that the intervention led to clinically significant improvements in perfectionism from pre-treatment to follow-up for six of the nine participants on two measures of self-referential perfectionism (MPS-SOP and the DAS perfectionism subscale) and for three of the nine participants on the measure of clinical perfectionism. Statistically significant improvements from pre- to post-intervention were found on each of these three measures of self-referential perfectionism. The improvements were maintained at follow-up.

No statistically significant differences at the group level were found on measures of anxiety or depression over the course of the intervention. However, clinically significant improvements on the BDI-II were seen for three participants (P4, P6 and P9) from pre- to post-intervention, two of these (P6 and P9) showing clinically significant improvement in clinical perfectionism. The other patient that improved (P1) had minimal depression at assessment and therefore clinically significant improvement was not possible. The clinically significant improvement in mood seen for P4, P6 and P9 was accompanied by clinically significant improvements on MPS-SOP and the DAS for all three participants. P4 and P6 also showed improvements from pre- to post-intervention on the CPQ, whereas none showed pre-post improvements on MPS-SPP. This suggests that, at least at the individual level, improvements in mood state can be brought about by changes in clinical perfectionism.

Those participants for whom the intervention was successful were all currently involved in the domains in which their perfectionism was expressed, thereby facilitating relevant behavioural experiments. They were also able to carry out the behavioural experiments set for homework in the way agreed upon in-session. Other participants found themselves unable to stick to the agreed limits for a variety of reasons including not being in the appropriate situation or due to chronically low self-esteem and feelings of hopelessness. Two of the participants for whom the intervention was not effective described having extremely critical parents and themselves exhibited a highly self-critical style. They tended to discount any positive findings from behavioural

experiments. In terms of initial levels of perfectionism, the three participants that did not improve (i.e. P2, P7 and P8) all had high (one standard deviation above the mean of a nonclinical control group) pre-intervention scores on MPS-SPP. Two of these (P2 and P8) also had high scores on MPS-SOP and the DAS. Of the three improvers (i.e. P1, P4 and P6), P6 had high initial scores on MPS-SOP, MPS-SPP and the DAS; however, P4 and P6's pretreatment scores were within one standard deviation of the mean of the control groups on the MPS-H and DAS.

These findings suggest that improvements in levels of perfectionism are not attributable to regression to the mean since the participants with higher initial scores tended not to improve. This finding, along with the work of Blatt *et al.* (1998) suggests that a lengthier or alternative intervention may be required for individuals with higher initial levels of dysfunction. It is also important to note that those who did not improve had high initial levels of socially prescribed perfectionism which, although not part of the construct of clinical perfectionism, should be assessed and treated when appropriate.

There were a number of limitations to this study. First, it is a case series and there were no controls for the passage of time or other variables that may have influenced outcome. A second limitation of the study is that the measures used in the study were not administered by an independent assessor, which may have affected how participants responded. In order to limit the effect of demand characteristics, participants were instructed to be totally frank and honest with their responses and not to try to please the researcher with their answers. Third, for some participants, a stable baseline was not obtained. Whilst carrying out a personalized formulation in the assessment session may have increased engagement, it may also have produced improvement during the baseline phase. Other limitations with the study are that the measure of clinical perfectionism used, the CPQ, has yet to be validated. However, no other measure of clinical perfectionism exists and visual analogue scales were also used. A longer-term follow-up (e.g. 12 months) would also have been valuable in order to see whether the improvements seen were maintained in the longer term, particularly in light of the criticisms made by Hewitt and colleagues (2003).

The results suggest that the construct of clinical perfectionism does have clinical utility in that, as well as producing improvements on a measure of clinical perfectionism, improvements were seen on two other measures of perfectionism. Perfectionism has traditionally been viewed as a stable personality trait rather than as a construct amenable to treatment and anecdotally clinicians often find it hard to treat. As a result of this, and findings that it has been found to be difficult to develop a good therapeutic alliance with perfectionistic patients (Zuroff *et al.*, 2000), it has been assumed that only a long-term, 'schema-focused' approach will facilitate meaningful change. The results of this study indicate that a short-term cognitive-behavioural intervention can engage perfectionistic patients in treatment and result in some improvement for two-thirds of the participants. However, a concern is the increase in axis I disorder symptoms in some participants at follow-up. This indicates that the intervention may be best used in conjunction with other treatments, for example as a module in the treatment of axis I disorders. Its brevity means that it can be incorporated into such evidence-based interventions if clinical perfectionism is thought to be a barrier to change.

In summary, this is the first systematic demonstration that a theory-based intervention for clinical perfectionism has clinical utility. Further investigation of this intervention is warranted in a larger trial.

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