Behavioural and Cognitive Psychotherapy, 2006, 35, 179–190
Printed in the United Kingdom First published online 8 August 2006 doi:10.1017/S1352465806003304

Factors Associated with Competence in Cognitive Therapists

Lee Brosan

Psychological Treatment Service, Cambridge, UK

Shirley Reynolds

University of East Anglia, UK

Richard G. Moore

Psychological Treatment Service, Cambridge, UK

Abstract. As a result of its expanding evidence base from randomized controlled trials, cognitive therapy is becoming increasingly widely practised in the treatment of many mental health problems. However, little is known about the extent to which it is carried out competently in practice, nor about what characteristics of therapists may be associated with competence. In therapists claiming to practice cognitive therapy, this study examined the relationship of a number of therapist factors, including training, profession, experience, supervision and accreditation, to competence. Therapists ($n = 24$) taped a mid-treatment cognitive therapy session. An independent rater, blind to information about the therapist, assessed the competence shown by the therapist during this session using the Cognitive Therapy Scale (CTS). Five randomly selected tapes were rated by a second rater and the inter-rater correlations were high. Although all therapists had received some cognitive therapy training during basic professional qualification, therapists with formal *post*-qualification training in cognitive therapy showed significantly higher levels of competence than those without. Psychologists were rated as more competent than therapists from other professions on one of the CTS subscales (Interpersonal Effectiveness). Number of years of experience, frequency of supervision, and accreditation were unrelated to ratings of competence. A number of accredited cognitive therapists scored well below a widely used criterion of competence.

Keywords: Cognitive therapy, competence, training, accreditation.

Introduction

Cognitive therapy is well established as an effective, brief, and cost-effective treatment for a range of mental health problems (for a review, see Roth and Fonagy, 2004). The last 20 years

Reprint requests to Lee Brosan, Psychological Treatment Service, Box 190, Addenbrooke's Hospital, Cambridge CB2 2QQ, UK. E-mail: leonora.brosan@cambsmh.nhs.uk

© 2006 British Association for Behavioural and Cognitive Psychotherapies

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

have seen an upsurge in the number of mental health professionals who claim to carry out cognitive therapy, and in the number of universities and other organizations offering cognitive therapy training. In theory, this situation should be a positive one, as more and more professionals learn and carry out cognitive therapy. However, there may be reasons for caution about this burgeoning practice of an apparently effective therapy.

There is growing concern that the results of randomized controlled trials carried out in research centres may not generalize to routine clinical settings (Margison et al., 2000). One of the factors that may limit the extent to which findings from research trials can be generalized to routine clinical practice is the competence with which cognitive therapy is carried out. Whereas the competence of the therapist in research trials is established through training, supervision and continued monitoring, little is known about the competence of therapists conducting therapy in routine clinical practice. For example, many therapists working in the NHS have not had the specialist post-qualification training in cognitive therapy that would usually be considered essential for therapists participating in an outcome trial. If the competence with which therapy is conducted affects the outcome for the patient, variations in competence mean that therapy may not be as effective in routine practice as in clinical trials.

There is some evidence that the effects of cognitive therapy depend on the competence of the therapist. In contrast to many previous research trials, Kingdon, Tyrer, Seivewright, Ferguson and Murphy (1996) found that brief cognitive-behaviour therapy was no more effective than placebo drug treatment in 210 patients with neurotic disorder. To investigate the relatively poor outcome of therapy, the 11 therapists that delivered therapy were classified as "competent" or "of uncertain competence". Patients of the therapists rated as competent had significantly better outcomes than patients of therapists of "uncertain competence". Differences in outcome were detectable early in therapy and persisted for the 2 years of the study.

Other studies have found more equivocal evidence on the relationship between competence and outcome in cognitive therapy. Shaw et al. (1999) examined data from the NIMH Treatment of Depression Collaborative Research Programme and found that ratings of therapists' competence predicted patients' outcomes as measured by observer ratings of depression, but not as measured by patient-rated measures. Two studies by DeRubeis and Feeley (1990) and Feeley, DeRubeis and Gelfand (1999) found that therapists' adherence to the concrete methods of cognitive therapy, but not more abstract discussions, predicted subsequent reduction in depressive symptoms. Although these latter studies examined therapists' adherence to certain manualized techniques rather than the competence or skill with which they were implemented, they do suggest that the benefits of poorly administered cognitive therapy will be limited.

This evidence suggests that cognitive therapy can be effective in a range of disorders, but is more likely to be effective when carried out competently. The competence with which therapy is carried out is therefore an important issue and the factors associated with competence merit consideration. Within the general literature on psychotherapy, there has been much consideration given to various therapist factors, such as the personality and adjustment of therapists (see Beutler, Machado and Neufeldt, 1994), but little investigation of their relation to competence. There has been some investigation of how more objective characteristics of therapists, such as level of training and experience, relate to outcome of therapy. Evidence of a relationship between these factors and outcome has been mixed, with at best only a weak association between therapists' level of training or experience and patients' improvement (see Stein and Lambert, 1984 and 1995 for reviews of therapists' experience and training

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

respectively). It would seem likely that therapist factors, such as receiving training in particular therapeutic models or acquiring experience in implementing them, would result in a greater level of competence in conducting therapy. In support of this, Blackburn et al. (2001) found a significant increase in ratings of competence of trainees in conducting cognitive therapy over a course of cognitive therapy training. However, the evidence on the relationship between therapist variables, such as training and experience, and competence remains sparse.

The aim of the current study was to examine the association between therapist factors and competence in cognitive therapy. The variables examined were selected for investigation on the basis of the plausibility of their relation to competence, their ease of measurement and their relevance to routine clinical practice. On the basis of plausibility and of the research cited above, training and degree of experience in cognitive therapy were included. The hypothesis was that receiving additional training (i.e. specialist post qualification training) in cognitive therapy and having a greater degree of experience in practice of therapy would be associated with higher levels of competence.

The profession of the therapist was also included as an independent variable. In common treatment settings, cognitive therapy is practised by therapists from a wide variety of professions, including clinical and counselling psychology, psychiatry, mental health nursing and social work. The nature and length of training varies widely between these groups and the issue of whether overall differences in competence in cognitive therapy can be discerned is of interest. Cognitive approaches have been dominant in psychology for some decades and have had a great influence on training courses in clinical psychology. Other health professions have a longer tradition within medical models and there may be relatively less emphasis on cognitive approaches during training. It is plausible that this greater degree of exposure to cognitive approaches during basic professional training would result in a greater degree of competence in cognitive therapy in psychologists as compared to other professionals.

In routine practice, various steps have been taken at an organizational level to attempt to ensure standards of competence, including the provision of supervision and the accreditation of therapists. The assumption underlying this is that regular supervision should help to maintain levels of competence in trained therapists. This study examined the relationship between supervision and competence, and it was hypothesized that greater frequency of supervision would be associated with higher levels of competence. Professional bodies have argued that one way of ensuring standards of practice is through regulation or accreditation. In the UK, the British Association of Behavioural and Cognitive Psychotherapies (BABCP) operates procedures for therapists to obtain accreditation as a cognitive or cognitive behavioural therapist. It was hypothesized that higher competence in cognitive therapy would be associated with accreditation by the BABCP.

Method

Design

Practitioners of cognitive therapy were recruited from a range of different professions and with a range of levels of training and experience. Participants provided information about their professional background and taped a mid-treatment cognitive therapy session. The tapes were rated on the Cognitive Therapy Scale (see below) by an independent rater, who was blind to

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

all therapist characteristics. A randomly selected subset of tapes was rated by a second rater, also blind to therapist characteristics. The relationship of each therapist factor with ratings of competence was examined separately using non-parametric statistics.

Participants

UK based therapists who claimed to carry out cognitive therapy were eligible for inclusion in the study. Therapists with a range of training and experience were sent a letter describing the study and inviting them to participate. This letter was sent to: a) 82 people who had completed a well-known specialist cognitive therapy course; b) 56 clinical psychologists on the list of clinical supervisors of a clinical psychology training programme; and c) 100 nurses drawn from a random sample of the membership of the BABCP. Of the 238 people contacted in this way, 31 returned a reply slip agreeing to take part in the study. A further effort to recruit participants was then made by circulating the invitation to participate along with a regular mailing from the BABCP to its membership (approximately 3000 people). In response, 16 further therapists agreed to take part.

The 47 therapists who had agreed to take part were then sent a study pack. This included the therapist questionnaire, a 120-minute blank audio cassette, an information sheet and consent form for clients and a client questionnaire (for the therapist to give some information about the client that could assist in rating the session on the Cognitive Therapy Scale). Some other measures were also included that are not described here. Participants were asked to complete the questionnaires, tape a mid-treatment therapy session and return the questionnaires and tape to the author. Twenty-four therapists of the 47 who had been sent the study pack (51%) returned the tape and questionnaires.

Measures

Therapist questionnaire. All participants completed a questionnaire, which asked participants for information about age, sex, current employment, professional qualifications, years of experience, training in cognitive therapy, frequency of supervision, and whether they were accredited by the BABCP as a cognitive therapist.

Cognitive Therapy Scale (CTS). The CTS was developed by Young and Beck (1980) as a measure for rating the level of competence in cognitive therapy exhibited by therapists in particular therapy sessions. In completing the scale, an experienced cognitive therapist rates an audio- or videotape of a therapy session on a number of components of competence in cognitive therapy. A number of studies have reported adequate internal reliability, inter-rater reliability and discriminant validity for the CTS (e.g. Dobson, Shaw and Vallis, 1985). The version of the CTS used here was adapted from the original version by Freeman, Pretzer, Fleming and Simon (1990). This version includes 13 items in three subscales: *General Interview Procedures* (4 items); *Interpersonal Effectiveness* (3 items) and *Specific Cognitive-Behavioural Techniques* (6 items). Each item is scored from 0 to 6.

All tapes were rated by an experienced cognitive therapist with 8 years of experience in cognitive therapy since obtaining post-qualification as a cognitive therapist. Five randomly selected tapes were also rated by a second rater, also an experienced cognitive therapist. The raters came from different professions (nursing and clinical psychology) and had carried out

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

cognitive therapy training at different centres. Both had previous experience of using the CTS for cognitive therapy training purposes.

In the NIMH Collaborative Depression study (Shaw et al., 1999) the original, 11-item version of the CTS was used. A score of 39 or less was used as a cut-off to indicate that therapists had not demonstrated the predetermined standard of competence. In the absence of revised published criteria, the same cut-off score of over 39 was used to describe competence in the current study, despite the inclusion of two additional items. This therefore represents a slightly more lenient criterion of competence than in the original NIMH study.

Training in cognitive therapy. Training in cognitive therapy was rated according to the information provided by participants about their training. These classifications were made blind to participants' scores on the CTS. Participants were classified into two groups, those with formal post-qualification training in cognitive therapy (Extra Training, ET) and those without (No Extra Training, NET). The criterion for extra training was completion of a post qualification, multi-disciplinary certificate or diploma at a well-established and nationally recognized programme. "Standard" training included all pre-qualification training (e.g. as a clinical psychologist), and all uni-professional training.

Ethics

Information about the study was provided to all potential participants. When therapists agreed to take part, they were provided with information sheets for their clients and consent forms to permit the taped session to be used for research purposes. Clients all participated anonymously. Therapists could choose whether to remain anonymous or whether to provide contact details in order to receive feedback on their tapes. Ethical approval was granted by the local NHS research ethics committee.

Data analysis

The main analyses examine differences in rated competence in therapy according to training level, experience, profession, supervision frequency, and accreditation. Because of the small sample size the distribution assumptions of parametric tests were mainly not met and non-parametric tests were used in most cases. The Mann-Whitney Test was used for analyses looking at group differences. Chi-square and Fisher's Exact Tests were used to examine the association between categorical variables. In order to explore associations between variables, Pearson correlations were used when considering variables across the whole sample ($n > 20$) and Spearman correlations to look at the associations in subgroups.

Results

Background information

Twenty-four people took part in the study (17 female). The age of participants ranged from 29 to 58 years, with a mean of 38 ($SD = 6.5$). There were no significant differences in age between male and female participants.

Profession. Of the 24 participants, 10 were psychologists, including 8 clinical psychologists, and 2 counselling psychologists with a special interest in cognitive therapy. Ten

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

were RMN nurses, including two with additional qualifications as a CPN, four with the nursing qualification ENB650 in behavioural psychotherapy, and four with other additional diplomas. Of the remaining four participants, two were occupational therapists, one was a social worker, and one was a specialist registrar in psychiatry. Because the numbers of participants from professions other than nursing or psychology was small and the main hypothesis concerned potential differences in the influence of cognitive approaches on basic training in psychology compared to other health professions, nurses and other professionals were combined into a single "other professions" group, with which psychologists were compared.

Experience and training. Experience was defined as the number of years in practice since obtaining a basic professional qualification (e.g. first registration as a nurse). There was a range of 1 to 21 years of post qualification experience (mean = 9.3, $SD = 5.9$). Mean length of post-qualification experience was less for psychologists than other professionals (psychologists, $M = 4.5$ years, $SD = 2.5$; other professionals, $M = 12.6$ years, $SD = 5.2$; Mann Whitney $U = 9.5$, $p < .01$). Thirteen participants had completed formal post-qualification training in cognitive therapy and were classified in the Extra Training (ET) group; 10 had not received formal extra training in cognitive therapy following basic professional qualification and were classified in the No Extra Training (NET) group. One participant was half way through a training course and could not be coded. Participants in the ET and NET groups did not differ in gender (Fisher's exact $p = .41$), profession (Fisher's exact $p = .69$), age (Mann Whitney $U = 52.0$, n.s.), or years of experience ($U = 47.5$, n.s.).

Cognitive therapy scale

Scores on the CTS ranged from 19–62, with a median score of 39 (Mean = 39.8, $SD = 12.1$). Using the established cut-off whereby a score of over 39 is classified as competent, 11 of the 24 tapes submitted by the sample demonstrated competent performance.

Inter-rater reliability

A random sample of five tapes was rated on the CTS by a second rater in addition to the main study rater, in order to examine inter-rater reliability. Spearman correlations were calculated for CTS scores from the two raters on the five randomly selected tapes. The inter-rater correlations were significant for CTS Total ($r = .82, p < .05$) and Subscale 1 ($r = .82, p < .05$). Correlations for Subscales 2 and 3 were not significant ($r = .67$ and $r = .56$ respectively).

Training level

Table 1 shows CTS scores for the group with extra training in cognitive therapy (ET) and those without (NET). The ET group had significantly higher ratings than the NET group on the total CTS and two of the three CTS subscales (General Interview Procedures and Specific Cognitive-Behavioural Techniques). The difference between the ET and NET groups on the other subscale (Interpersonal Effectiveness) was in the same direction but did not reach significance.

In a categorical analysis using the cut-off score of over 39 on the CTS, 10 of the 13 therapists in the Extra Training group were classified as competent, compared with 1 out of 10 in the

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

Table 1. CTS means and standard deviations for ET and NET groups

	ET ($n = 13$) Mean (*SD*)	NET ($n = 10$) Mean (*SD*)	Mann-Whitney *U*
CTS total	46.9(9.6)	30.8(9.0)	14.5*
Subscale 1: General interview procedures	14.1(3.7)	8.8(3.5)	18.5*
Subscale 2: Interpersonal effectiveness	12.4(3.2)	9.8(3.0)	37.0
Subscale 3: Cognitive-behavioural techniques	20.5(4.6)	12.2(4.0)	10.0*

*$p < .01$ (1-tailed).

Table 2. CTS means and standard deviations for psychologists and others

	Psychologists ($n = 10$) Mean (*SD*)	Others ($n = 14$) Mean (*SD*)	Mann-Whitney *U*
CTS Total	43.6(3.7)	37.1(10.6)	42.5
Subscale 1: General interview procedures	11.9(5.7)	11.6(3.2)	60.0
Subscale 2: Interpersonal effectiveness	12.9(3.2)	10.1(2.8)	35.0*
Subscale 3: Cognitive-behavioural techniques	18.8(5.8)	15.3(5.7)	48.5

*$p < .05$ (1-tailed).

"standard" training group. This difference between the ET and NET groups in the number of therapists classified as competent was significant (Fisher's exact $p = .002$). This confirms the hypothesis that post-qualification training in cognitive therapy is associated with competence.

Profession

Table 2 shows mean scores on the CTS for psychologists and for the other professionals in the sample. Mean scores indicate that although psychologists received higher ratings for all subscales, this was significantly different only for Interpersonal Effectiveness. There was no significant difference between psychologists and other professionals in overall scores or in scores on the General Interview Techniques or Specific Cognitive Behavioural Techniques subscales.

Experience

The association between post qualification experience and scores on the CTS was examined using Pearson correlations. The correlation between experience and CTS total was −0.16 ($n = 24$, n.s.). Similarly, the correlations between years of experience and the CTS subscale scores were low and not significant (General Interview Procedures, $r = -0.02$; Interpersonal Effectiveness, $r = -0.26$; Cognitive-Behavioural Techniques, $r = -0.18$). Time elapsed since qualification was thus not associated with competence as measured by the CTS.

Supervision

On the basis of frequency of supervision, participants were assigned to one of four categories as shown in Table 3. Kruskall Wallis tests revealed that there were no significant differences

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

Table 3. . Frequency of supervision: numbers of participants and CTS mean scores

	Supervision once a week Mean (*SD*)	Supervision once every two weeks Mean (*SD*)	Supervision once a month Mean (*SD*)	Supervision less than once a month or not at all Mean (*SD*)	Kruskall-Wallis Chi-Squared ($df = 3$)
n	8	7	6	3	
CTS total	36.4 (11.9)	39.1 (14.0)	43.2 (9.9)	43.7 (16.2)	1.7
Subscale 1: General interview procedures	10.6 (4.4)	11.0 (4.5)	13.2 (3.5)	13.7 (6.1)	1.8
Subscale 2: Interpersonal effectiveness	11.4 (3.0)	10.1 (4.4)	12.5 (2.7)	11.3 (2.1)	1.8
Subscale 3: Cognitive-behavioural techniques	14.4 (5.5)	18.0 (6.8)	17.5 (4.5)	18.7 (8.4)	2.2

Table 4. CTS means and standard deviations of accredited and non-accredited practitioners

	Accredited ($n = 13$) Mean (*SD*)	Non-accredited ($n = 11$) Mean (*SD*)	Mann-Whitney *U*
CTS total	40.3 (13.1)	39.2 (11.5)	70.5
Subscale 1: General interview procedures	11.8 (4.4)	11.7 (4.4)	71.0
Subscale 2: Interpersonal effectiveness	11.4 (3.8)	11.2 (2.6)	70.5
Subscale 3: Cognitive-behavioural techniques	17.2 (6.1)	16.3 (5.9)	63.5

between the groups on CTS total score or subscale scores. There was an unexpected trend for lower frequency of supervision to be associated with higher scores, but this did not approach significance.

Accreditation

Nine participants were accredited, four were in the process of applying for accreditation, and 11 were not accredited. For analyses, the four "accreditation applied for" cases were included as accredited, since descriptions of their experience and training were such that the author believed that they would be likely to be accepted for accreditation. There was no significant difference between the Extra Training and No Extra Training groups in numbers of participants who were accredited (9/13 and 4/10 respectively, Fisher's exact $p = .16$). There were no differences between psychologists and other professions in numbers of accredited participants (4/10 and 9/14 respectively, Fisher's exact $p = .41$).

CTS scores for participants who were accredited (or had applied for accreditation) were compared with scores for participants who were not accredited. Table 4 shows the mean CTS subscale and total scores for the two groups. There were no significant differences between the accredited and non-accredited groups on any subscales or on the total score. Exploring the competence shown by accredited therapists further, the range of CTS scores in the accredited

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

group was 19–62. Of these 13 accredited therapists, 7 (54%) obtained a score of 39 or below, and so failed to meet the criterion for being classified as competent.

Discussion

This study examined the relationship of a number of therapist factors to ratings of competence in cognitive therapy. The only factor significantly related to overall competence was level of training: therapists who had completed additional, post-qualification training courses in cognitive therapy displayed higher levels of competence than those who had not. There was no evidence of a relationship between competence and numbers of years of experience, frequency of supervision or accreditation status. For professional background, there was a trend for psychologists to display higher levels of competence, but this was significant on only one subscale of the CTS.

The clear relationship between training and competence emerged despite the fact that all participants had received some degree of training in cognitive therapy. Participants in the No Extra Training group had all completed basic professional training, which includes some familiarization with cognitive therapy. Furthermore, the majority had completed some further training that did not meet the stipulation of a formal, intensive cognitive therapy training programme that was the criterion for being classified in the Extra Training group. For example, some nurses had completed the ENB650 qualification in behavioural psychotherapy and most participants had carried out other training activities, including reading and attendance at workshops. Completion of a formal, post-qualification cognitive therapy training course was of clear advantage compared to these less intensive training activities. It is of course possible or even likely that these other forms of training boost competence to some degree and their effects merit separate investigation. However, the importance of formal post-qualification training was suggested by the numbers of therapists satisfying accepted criteria for competence. Taking the cut-off score of over 39 on the CTS, 10 of the 13 therapists in the ET group scored within the competent range, compared with only 1 of the 10 therapists in the NET group.

These results must of course be interpreted with some caution, both due to the small sample size and the correlational nature of the study. It is most likely that the results reflect the effects of formal training courses on competence. A previous study of the effects of just such a training course found that trainees' scores on a version of the CTS increased over the duration of the course (Blackburn et al., 2001). However, the current results may reflect pre-existing differences in competence between the ET and NET groups. For example, it is possible that therapists with a greater natural ability in cognitive therapy are more likely to apply for or be accepted on such training courses. Alternatively, the results may reflect the influence of a third variable: therapists with a particularly high level of motivation may be more likely to enrol on formal training courses and may be more likely to develop their competence. Further research could help to investigate or exclude these alternative explanations.

The hypotheses that experience, frequency of supervision and accreditation status would be associated with competence were not confirmed. The measure of experience used here was of the number of years elapsed since basic qualification. One possible explanation for the lack of relationship of this measure to competence is that different therapists may wait different lengths of time between basic qualification and focusing on practice as a cognitive therapist. Furthermore, even once someone comes to consider themselves a cognitive therapist, they may spend much of their time in activities other than conducting individual therapy. A measure of

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

experience that more closely reflects experience of conducting individual therapy, such as the number of patients seen since qualification, may be more closely related to competence.

Similarly, the measure of supervision used here was its frequency. The lack of relationship of frequency of supervision to competence may again reflect the correlational nature of these data. It is possible that therapists perceived to be less competent may seek or be offered more frequent supervision, whereas more skilled therapists may be offered less supervision. This effect of competence on frequency of supervision received may obscure an effect of supervision itself on competence. Alternatively, it may be that the important aspect of supervision is its quality rather than simply its frequency and reliable measures of this are needed. Given the importance accorded to continuing supervision within codes of practice for therapists, further research is clearly needed to establish its benefits.

The lack of any discernible relationship between accreditation and competence compares markedly to the clear effects of training level. In explaining this lack of association, it is noteworthy that differences in accreditation status between the ET and NET groups were not significant. This reflects that basic professional training plus informal attendance at some relevant activities is sufficient to achieve accreditation as a cognitive therapist in the UK. In addition, accreditation is a voluntary procedure, such that highly trained and competent therapists may simply not seek accreditation. These factors mean that accreditation can unfortunately not be used as any marker of competence. Most worrying, a sizeable number of accredited therapists scored below the accepted criterion for competence. Such therapists on this basis would not be accepted as therapists in any outcome study of cognitive therapy, and it is unclear whether the established effectiveness of cognitive therapy can be assumed to apply to such therapists, even though accredited. Although accreditation with the BABCP concerns standards of professional practice rather than competence per se, it is unlikely that a member of the public would find much reassurance in being treated by a professional yet not competent therapist.

There was some suggestion of a slight relationship between professional group and competence, in that psychologists scored more highly than other professions on only one subscale of the CTS. The hypothesis was that psychology training would place greater emphasis on structure and on cognition and behaviour, whereas training in other professions would place greater emphasis on non-specific interpersonal factors. It is therefore surprising that psychologists scored higher on the Interpersonal Effectiveness subscale, rather than those that measure structuring of the session or specific cognitive and behavioural techniques. One possible explanation of this result may be that practitioners learning cognitive therapy report that it is hard both to concentrate on the technical aspects of therapy and to work to maintain the therapeutic relationship. It is possible that other professions with less grounding during basic training in psychological theory and practice have to concentrate harder on structural and technical aspects of therapy than do psychologists, with greater disruption to the quality of the relationship occurring. However, the small sample size and uncertain validity of the specific subscales of the CTS should again be noted and no firm conclusions should be drawn.

A number of methodological shortcomings of the study must be considered. The confidence in the findings in relation to the small sample size has been considered above. The small sample is more likely to result in failure to detect real effects of a small or moderate magnitude than with apparently detecting statistically spurious effects. The small sample also raises the question of its representativeness. The participants were self-selected from a much larger pool of cognitive therapists contacted about the study. The reluctance of non-participants is

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

understandable in terms of the effort required to complete the measures required, especially for therapists who do not routinely tape their sessions, and the fear of evaluation raised by participation. The participants in this study may be a particularly keen and confident sample compared to the average therapist working in a clinical setting. Short of coercing therapists to participate in research, it is hard to see how this could be addressed. Whilst it may be possible to obtain data on the effects of particular formal training courses, as in the Blackburn et al. (2001) study, it will be harder to obtain reliable data on competence in therapists not undertaking such training. More data about the specific effects of the less formal or intensive training activities of the kind that the NET group were participating in would be welcome as their value has yet to be established.

The implications of the study for the routine practice of cognitive therapy in clinical settings are worrying. The study shows a clear effect of formal post qualification training such that few therapists without it are likely to perform to the standard of competence on which outcome trials have been based. Such training is expensive and time consuming, so within the NHS it is not reasonable to suppose that cognitive therapy can always be carried out by practitioners who have completed such training courses. Indeed, in everyday clinical practice many therapists may be carrying out cognitive therapy with even less training than the No Extra Training group here. Although the burgeoning of cognitive therapy in clinical practice appears to result from the principles of evidence based medicine, the encouraging results of outcome trials cannot be assumed to generalize to routine clinical situations. On the basis of these results, organizational solutions such as providing supervision or insisting on accreditation do little to address this problem.

Although the relationship between therapist competence and outcome is complicated (e.g. Shaw et al., 1999), competence is likely to be a necessary, if not always sufficient, factor in determining outcome. More research is needed on how variations in training and competence affect outcome under routine practice conditions. Before the most cautious implication of these results, that all cognitive therapists should undergo lengthy formal training courses, is accepted, a number of alternative lines of exploration seem particularly worthwhile. One is to examine whether the generic concept of competence can be broken down to match more specific clinical problems. It might be possible to provide brief training courses that equip relatively inexperienced therapists to treat specific clinical disorders competently. For example, Moore (unpublished manuscript) has developed a Self-Help Course for Depression that is designed to guide nurses in general practice who have little training in mental health in treating depression using a cognitive approach. The commonly made assumption that therapists with a lower overall level of competence may still achieve good outcomes with less severe or chronic disorders also merits further investigation. In addition, the recent emphasis on practice based evidence should foster the provision of information on the conditions under which cognitive therapy actually does work. Progress in any of these directions will depend on the development of a willingness in individuals and organizations to consider, discuss and evaluate competence and the factors contributing to it.

Acknowledgements

This study was undertaken as part of the first author's Doctorate from the University of East Anglia. We are indebted to David Allison for rating the therapy tapes, and to the patients of

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press

the therapists who allowed their clinical sessions to be sent to a stranger. Most of all we are indebted to the cognitive therapists who took part.

References

Beutler, L. E, Machado, P. P. and Neufeldt, S. A. (1994). Therapist variables. In A. E. Bergin and S. L. Garfield (Eds.), *Handbook of Psychotherapy and Behaviour Change* (4th edn.). New York: Wiley.

Blackburn, I. M, James, I. A., Milne, D. L., Baker, C., Standart, S., Garland, A. and Reichelt, F. K. (2001). The Revised Cognitive Therapy Scale: psychometric properties. *Behavioural and Cognitive Psychotherapy, 29*, 431–446.

DeRubeis, R. J. and Feeley, M. (1990). Determinants of change in cognitive therapy for depression. *Cognitive Therapy and Research, 14*, 469–482.

Dobson, K. S., Shaw, B. F. and Vallis, T. M. (1985). Reliability of a measure of the quality of cognitive therapy. *British Journal of Clinical Psychology, 24*, 295–300.

Feeley, M., DeRubeis, R. J. and Gelfand, L. A. (1999). The temporal relation of adherence and alliance to symptom change in cognitive therapy for depression. *Journal of Consulting and Clinical Psychology, 67*, 578–582.

Freeman, A., Pretzer, J., Fleming, B. and Simon, K. M. (1990). *Clinical Applications of Cognitive Therapy*. New York: Plenum Press.

Kingdon, D., Tyrer, P., Seivewright, N., Ferguson, B. and Murphy, S. (1996). The Nottingham study of neurotic disorders: influence of cognitive therapists on outcome. *British Journal of Psychiatry, 169*, 93–97.

Margison, F., Barkham, M., Evans, C., McGrath, G., Mellor-Clark, J., Audin, K. and Connell, J. (2000). Measurement and psychotherapy: evidence-based practice and practice-based evidence. *British Journal of Psychiatry, 177*, 123–130.

Moore, R. G. (unpublished manuscript). *The Self-Help Course for Depression*. Cambridge: Cambridge and Peterborough Mental Health Partnership NHS Trust, Addenbrooke's Hospital.

Roth, A. and Fonagy, P. (2004). *What Works for Whom: a critical review of psychotherapy research* (2nd edn.). New York: Guilford.

Shaw, B. F., Elkin, I., Yamaguchi, J., Olmsted, M., Vallis, M., Dobson, K. S., Lowery, A., Sotsky, S. M., Watkins, J. T. and Imber, S. D. (1999). Therapist competence ratings in relation to clinical outcome in cognitive therapy of depression. *Journal of Consulting and Clinical Psychology, 67*, 837–846.

Stein, D. M. and Lambert, M. J. (1984). On the relationship between therapist experience and psychotherapy outcome. *Clinical Psychology Review, 4*, 127–142.

Stein, D. M. and Lambert, M. J. (1995). Graduate training in psychotherapy: are therapy outcomes enhanced? *Journal of Consulting and Clinical Psychology, 63*, 182–196.

Young, J. and Beck, A. T. (1980). *Cognitive Therapy Scale Rating Manual*. Unpublished manuscript. Philadelphia, PA: University of Pennsylvania.

https://doi.org/10.1017/S1352465806003304 Published online by Cambridge University Press