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Acquiring and Refining CBT Skills and Competencies: Which Training Methods are Perceived to be Most Effective?

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Background: A theoretical and empirical base for CBT training and supervision has started to emerge. Increasingly sophisticated maps of CBT therapist competencies have recently been developed, and there is evidence that CBT training and supervision can produce enhancement of CBT skills. However, the evidence base suggesting which specific training techniques are most effective for the development of CBT competencies is lacking. **Aims:** This paper addresses the question: What training or supervision methods are perceived by experienced therapists to be most effective for training CBT competencies? **Method:** 120 experienced CBT therapists rated which training or supervision methods in their experience had been most effective in enhancing different types of therapy-relevant knowledge or skills. **Results:** In line with the main prediction, it was found that different training methods were perceived to be differentially effective. For instance, reading, lectures/talks and modelling were perceived to be most useful for the acquisition of declarative knowledge, while enactive learning strategies (role-play, self-experiential work), together with modelling and reflective practice, were perceived to be most effective in enhancing procedural skills. Self-experiential work and reflective practice were seen as particularly helpful in improving reflective capability and interpersonal skills. **Conclusions:** The study provides a framework for thinking about the acquisition and refinement of therapist

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skills that may help trainers, supervisors and clinicians target their learning objectives with the most effective training strategies.

Keywords: Cognitive behavioural therapy, training, supervision, reflection, declarative, procedural.

Introduction

Whilst there is increasing evidence linking increased therapist competence with improved patient outcomes (Grey, Salkovskis, Quigley, Clark and Ehlers, 2008; Kuyken and Tsivrikos, 2009; Trepka, Rees, Shapiro, Hardy and Barkham, 2004), the evidence about whether training enhances therapist competence is mixed. Some studies report that training can enhance therapists' competence and/or patient outcomes (Mannix et al., 2006; Milne, Dickson, Blackburn and James, 1999; Sholomskas et al., 2005; Westbrook, Sedgwick-Taylor, Bennett-Levy, Butler and McManus, 2008) while others find little or no enduring effects (King et al., 2002; Walters, Matson, Baer and Ziedonis, 2005). Given this variation in findings, it is important to generate a more differentiated evidence-base for CBT skills training so that the efficacy of CBT training can be maximized in a similar way to the methods by which therapeutic efficacy has been enhanced, i.e. through research into the efficacy of treatment components and procedures (Jacobson et al., 1996; Salkovskis, Hackmann, Wells, Gelder and Clark, 2006).

Twenty-five years ago Schacht (1984) posed an important question for psychotherapy trainers and supervisors: "What training, by whom, is most effective with which student, who is acquiring the specific knowledge or competency, under which set of circumstances, and at what cost?" The last few years have seen the development of increasingly sophisticated maps of therapist competencies (Bennett-Levy, 2006; Roth and Pilling, 2008). However, as yet there are few data available to answer Schacht's question and there are several challenges in attempting to answer it. First, to experimentally isolate one component of training from another represents a practical challenge. Second, it is hard to construct experimental studies within the training and supervision context because training courses do not normally have "untrained" control groups (other than applicants they have rejected), and typically involve small numbers, especially if the more labour intensive supervision components are included. Third, until recently, there have been few theoretically grounded models of therapist skill development or training methods.

In order to deliver the most effective training or supervision, it would clearly be helpful to understand which training methods are most effective for training which skills (Bennett-Levy and Thwaites, 2007; Milne, 2008). Better understanding could lead to more targeted training. There is some evidence from a disparate literature across different therapies that various training/supervision methods are effective in acquiring therapist knowledge/skills to greater or lesser extents – for instance, role-play (Milne, 1982), modelling (Baum and Gray, 1992), reading/lectures (Sholomskas et al., 2005), self-experiential work (Bennett-Levy et al., 2001; Sanders and Bennett-Levy, in press), and reflective practice (Sutton, Townend and Wright, 2007) have all been identified as useful training/supervision strategies. However, no studies have investigated whether different training methods are differentially effective in acquiring different kinds of knowledge/skill. For example, is reading about CBT more effective than

self-experiential work for learning conceptual knowledge? Which is more effective for acquiring interpersonal skills?

The Declarative-Procedural-Reflective (DPR) model provides a potentially useful model for conceptualizing therapist skill development (Bennett-Levy, 2006; Bennett-Levy, Thwaites, Chaddock and Davis, 2009; Kuyken, Padesky and Dudley, 2009). It differentiates three information processing systems:

1. The Declarative system is a knowledge system founded on an intellectual understanding of the therapy and the theoretical models on which it is based, e.g. knowledge of Beck's CBT formulation of depression;
2. The Procedural system is a storehouse of skills, attitudes and behaviours in action; what Schön (1983) called "practical competence" and "professional artistry". The difference between the declarative and procedural systems is that, while academic researchers with no clinical experience might have extensive declarative knowledge of models and treatment protocols, their procedural systems are likely to be impoverished because their declarative knowledge will never have been applied in practice. The reverse might be true for practising clinicians without access to contemporary research or clinical literature.
3. The Reflective system is the "engine" of ongoing therapist skill development (Bennett-Levy et al., 2009), especially once the basic building blocks of declarative and procedural knowledge/skills are in place (Bennett-Levy, 2006). The capacity for reflection is a key metacompetency that is thought to differentiate the average therapist from the expert therapist (Schön, 1983; Skovholt and Rønnestad, 2001). The reflective system is typically called into action when a problem arises in clinical practice (e.g. mismatch between expectations and outcome). Following reflection on the problem, the reflective system may be used to refine declarative knowledge and procedural skills. In particular, in more advanced therapists, the reflective system enables therapists to acquire a progressively refined set of "when-then" rules, procedures and skills (Bennett-Levy, 2006), e.g. "If you sense a therapeutic rupture, check with the patient, conceptualize therapist's role, patient's role, and interaction; check back with patient, discuss; etc."

The DPR model also identifies three kinds of knowledge/skill: conceptual, technical, and interpersonal. In brief: conceptual knowledge/skills refer to knowledge and use of CBT models and formulations; technical knowledge/skills refer to the knowledge and use of CBT techniques (e.g. activity scheduling, behavioural experiments); while interpersonal knowledge/skills refer to knowledge/skills within the interpersonal domain which may impact on the therapeutic relationship (e.g. knowing that the collaborative relationship is central to CBT, and manifesting this in action). These three knowledge/skills bases are represented in both the declarative and procedural systems. For instance, we can have declarative knowledge about conceptualization in CBT (knowledge in principle), and/or the procedural skills to use collaborative conceptualization with a patient (practical "how to" knowledge).

The DPR model therefore provides a framework within which to begin to address Schacht's (1984) question: Which kind of training/supervision strategies are most effective in acquiring/refining which kinds of knowledge or skill? The present study set out to generate information in relation to this question by surveying the learning experiences of a large group of experienced CBT therapists and asking which training/supervision methods had, in their experience, proved most effective in enabling them to learn different kinds of CBT knowledge and skill.

The primary hypothesis, directly derived from the DPR model, was that therapists would perceive different learning methods to be differentially effective in enhancing different kinds of therapist knowledge/skill. Secondary hypotheses derived from Bennett-Levy (2006), Bennett-Levy and Thwaites (2007), and Schön (1983) were:

(i) Didactic means of information transfer (lectures/talks, reading) will be perceived to be most effective for learning declarative knowledge.
(ii) Enactive procedures (role-play, self-experiential work) will be perceived to be most effective with the learning of procedural skills.
(iii) Modelling/demonstration provides the bridge/translation process between didactic information and procedural skills. Therefore, it should both be perceived to deepen understanding of declarative knowledge, and to be an effective strategy for the learning of procedural skills (declarative knowledge + modelling + role-play = classic way to learn procedural skills).
(iv) Reflective practice should be seen as the key way to enhance reflective skills (to develop the "reflective practitioner" e.g. to identify and resolve problems in therapy).
(v) Reflective practice should also be seen to be a generally effective technique for the ongoing learning of declarative knowledge and procedural skills.
(vi) Self-experiential work and (self)-reflective practice will be perceived to be more effective than other methods for learning knowledge/skills in the interpersonal domain.

Method

Participants

Participants were 120 CBT therapists who attended a 2-day workshop entitled "Becoming a better CBT therapist: adopting a coherent framework to guide the development of supervisees, trainees – and ourselves", presented by the first author. The workshop was held in Uppsala, Sweden and was attended by 142 therapists, 85% of whom elected to complete the questionnaire. Participation in the study was anonymous and voluntary.

Participants' mean age was 46.3 ($SD = 10.1$ years). Seventy-two percent were female, 28% were male. Participants' mean number of years since the start of training was 8.8 ($SD = 8.1$) years. Forty percent were CBT supervisors, 33% were CBT trainers; 90% described CBT as their main mode of therapy. It is of relevance to note that in Sweden therapists must undergo personal therapy in order to achieve registration as a psychotherapist. Participants' mean hours spent in personal therapy were 95.2 ($SD = 74.9$) hours, of which a mean of 28.1 ($SD = 33.3$) hours had been spent receiving CBT therapy. Participants had experienced a mean of a further 31.1 ($SD = 58.7$) hours in group therapy. This represents a far greater amount of time engaged in self-experiential work than is typical in many countries where personal therapy is not a formal requirement for accreditation (e.g. UK, USA).

Procedure

During the first morning of the workshop, the workshop leader presented the DPR model, and participants engaged in a series of exercises to familiarize themselves with the concepts.

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Immediately after lunch, participants were asked to complete the *Methods of Learning Therapy Skills Questionnaire* (see below for detail). It was explained that this was for two purposes: a) To aid their workshop learning; b) For research purposes if they were willing to be a participant.

Materials

The instructions for the *Methods of Learning Therapist Skills Questionnaire* were: "Based on your personal experience, which *three* learning methods in the top row do you think are most effective in helping you, and supervisees, to acquire and refine the listed skills and knowledge? Refer to pages 8–10 for description of terms."

The questionnaire was set in a grid, with learning methods on the horizontal plane, and knowledge/skills on the vertical plane. Six learning methods and 11 knowledge/skills items were listed, so there were a potential 66 questions, plus demographic data. As an aide-memoire, definitions were provided for all relevant terms (see Appendix 1).

The learning methods listed in the top row of the grid in the following order were the six most commonly used methods in training and supervision:

1. Modelling/demonstration
2. Reading
3. Role-play
4. Self-experiential work
5. Lectures and talks
6. Reflective practice

The 11 listed items of therapist knowledge and skills that mapped onto the three information processing systems (declarative, procedural, and reflective) were directly derived from the DPR model (see Bennett-Levy, 2006), as were the three types of knowledge/skill (conceptual, technical, interpersonal). For each item, the information processing system and knowledge/skill are indicated by abbreviations below:

1.	Conceptual knowledge	Dec/Concept
2.	Technical knowledge	Dec/Tech
3.	Interpersonal knowledge	Dec/Interpers
4.	Interpersonal perceptual skills e.g. empathic attunement	Proc/Interpers
5.	Therapist stance, attitude, beliefs and assumptions	Proc/Interpers
6.	Interpersonal relational (communication) skills	Proc/Interpers
7.	Conceptual skills	Proc/Concept
8.	Technical skills	Proc/Tech
9.	When-Then rules, plans, procedures and skills	Proc/(non-specific)
10.	Self-reflection	Refl
11.	General reflection	Refl

Participants were asked to identify what they thought were the three most effective learning methods (1, 2 and 3) for each of the 11 items, which were listed in the order here.

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Table 1. Percentage of therapists endorsing each learning method as preferred method of learning (First, Second or Third preference): items endorsed by >50% of respondents are highlighted

	Learning methods					
DPR systems	Reading	Lectures and talks	Modelling/ demonstration	Role-play	Self-experiential work	Reflective practice
Declarative knowledge	**62**	**62**	**67**	32	37	42
Procedural skills	27	28	**59**	**56**	**61**	**73**
Reflective system	39	23	31	34	**80**	**94**
Conceptual knowledge/skills	**63**	**64**	**70**	30	26	48
Technical knowledge/skills	**52**	**54**	**85**	**55**	33	28
Interpersonal knowledge/skills	24	23	46	**54**	**77**	**82**

Scoring

For each learning method, the percentage of participants ranking that method as one of the most three effective methods was computed (e.g. lectures/talks = 64% for conceptual knowledge/skills, and 23% for interpersonal knowledge/skills; self-experiential work = 26% for conceptual knowledge/skills, and 77% for interpersonal knowledge/skills.

To compute declarative, procedural and reflective system scores, the mean percents of the contributing items were aggregated and an overall mean percent was computed for each system:

- Declarative system score = mean % of the three declarative knowledge items (see above) – conceptual knowledge + technical knowledge + interpersonal knowledge
- Procedural system score = mean % of six procedural system items
- Reflective system score = mean % self-reflection + general reflection

The conceptual, technical and interpersonal knowledge/skills scores were computed as follows:

- Conceptual knowledge/skills = mean % conceptual knowledge + conceptual skills;
- Technical knowledge/skills = mean % technical knowledge + technical skills;
- Interpersonal knowledge/skills = mean % interpersonal knowledge + therapist stance etc + interpersonal relational skills + interpersonal perceptual skills.

Results

Table 1 reports mean percentages for each category. The data gathering method did not allow for statistical analysis – it was necessary to trade-off statistical sophistication with time and ease of administration for a 66-item questionnaire completed as part of a workshop. However, the results are sufficiently clear that eyeball analysis gives a clear indication of data trends.

Table 1 illustrates the percentage of therapists endorsing each choice of learning strategy as their first, second or third most effective in enhancing each type of knowledge or skill. Items endorsed by over 50% of respondents are highlighted in bold type for clarity. It is apparent

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that quite different preferred learning methods are endorsed, depending on the knowledge or skill that is being learned.

The learning methods (>50% endorsement) perceived to be most effective in enhancing declarative knowledge were (in descending order): modelling, reading, and lectures. The learning methods perceived to be most effective in enhancing procedural skills were reflective practice, self-experiential work, modelling and role-play. The learning methods perceived to be most effective in enhancing the reflective system were reflective practice and self-experiential work.

When the data are analysed into conceptual, technical and interpersonal components (combining declarative and procedural systems within these categories), other patterns emerge. The learning methods perceived to be most effective in enhancing conceptual knowledge/skills are modelling/demonstration, lectures, and reading. The learning methods perceived to be most effective in enhancing technical knowledge/skills are modelling (by some distance), then role-play, lectures, and reading. Quite a different pattern emerges for which skills are perceived to be most effective in enhancing interpersonal knowledge/skills, with reflective practice and self-experiential work most often endorsed, followed by role-play. In contrast, reading and lectures were perceived to be of limited benefit for the learning of interpersonal skills.

Discussion

The results of this study provide preliminary data about which learning methods are perceived to be most effective in enhancing which types of therapeutic knowledge/skills. They provide support for the primary hypothesis that different methods of learning would be perceived as differentially effective in enhancing different types of knowledge and skill. More specifically, reading and lectures/talks were most frequently rated as effective strategies for learning declarative knowledge and conceptual knowledge/skills, but relatively poor strategies for learning procedural skills, particularly in the interpersonal domain. Modelling was a highly rated strategy for both declarative and procedural learning, and for conceptual and technical knowledge/skills acquisition. Role-play was most strongly associated with procedural skills learning, particularly for technical and interpersonal skills. Reflective practice and self-experiential work showed similar patterns of perceived effectiveness. Both were perceived to be effective in enhancing the procedural and reflective systems, particularly for the learning of interpersonal skills.

Predictions generated by the DPR model were well supported. It was particularly interesting to note how strongly modelling/demonstration was endorsed as an effective training method. To summarize the results from the three systems:

1. Readings and lectures are perceived to be the most effective ways to learn declarative information.
2. Modelling is perceived to be helpful for both declarative and procedural systems and may provide the bridge between them.
3. The experiential methods – role-play and self-experiential work – together with modelling and reflective practice are perceived to embed the new learning within the procedural system.
4. Self-experiential work and reflective practice are perceived to be the most effective ways to enhance the reflective system.

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Along the conceptual-technical-interpersonal dimension:

1. Reading, lectures and modelling are perceived as the most effective strategies for learning conceptual and technical knowledge/skills. Role-play, also, is seen as effective for learning technical knowledge/skills, but rather less so for conceptual skills.
2. For interpersonal skills the opposite pattern emerges, with reflective practice, self-experiential work and role-play being perceived as the most effective learning strategies, as predicted by recent work on the impact of self-practice/self-reflection (Bennett-Levy et al., in press).

It is acknowledged that there are a number of limitations to the current study. First, it is reliant on self-report, rather than actual measures of performance. This necessarily raises questions about the reliability and validity of the results. The accuracy of retrospective accounts may be open to question, and the fact that clinicians *perceive* these methods to enhance their skills does not necessarily mean that they actually *do* enhance their skills. Second, the study was carried out on a self-selecting population of workshop attendees and may not be representative of all groups of clinicians. Third, it is possible that participants' ratings may have been influenced by previous reading, or implicit messages about training methods given by the workshop leader when the DPR model was presented during the first part of the workshop. However, the workshop leader was careful not to discuss training methods before the questionnaire was completed, and participants were instructed verbally and within the questionnaire to respond "*based on your experience*". Fourth, no statistical analysis was possible for these data as there were no continuous variables and not all items were rated (only 3 of the 6 methods for any question). The pragmatics of administering the questionnaire within the course of a 2-day training program meant that (i) only limited time could be given to it, and (ii) it needed to be administered at a very specific time – after the DPR model had been explained, and before the remainder of the workshop, which focused on best practice training methods for specific knowledge/skills and would have biased the results. Future studies need to determine the relative statistical strengths of relationships between learning methods and skills/strategies to indicate more clearly which are "first-line" training methods and which are "supportive".

Accepting these limitations, the results provide some preliminary data in regard to the important question of which training methods are most effective for learning which types of skills. Results accord well with the study hypotheses and have implications for training/supervision practice. Interestingly all six training methods were perceived as effective, and each was endorsed to some extent for every item. However, the key finding is that their relative effectiveness appears to differ according to the particular skill set being trained.

CBT training/supervision has traditionally placed strong emphasis on accumulating knowledge of research and clinical literature through reading and lectures/talks. The current results suggest these are appropriate foundations for conceptual and technical knowledge/skills learning. Modelling emerges as a particularly important training strategy, which perhaps has a specific declarative/procedural "bridging" role. We wonder whether sufficient attention has been given to modelling in the training and supervision that we have witnessed. Technological advances offer new opportunities in this respect – in particular, Bennett-Levy and Perry (2009) have argued that online CBT training may offer a particular advantage for modelling performance, since videos can be repeatedly observed from a variety of perspectives, compared with one-off demonstrations in training workshops or supervision. Role-plays emerge, not

surprisingly, as a useful strategy to embed procedural skills. Within supervision, role-play is typically under-utilized, and should be given greater emphasis (Milne, 2008).

The present sample of therapists were well-qualified to assess the value of self-experiential work, since in Sweden therapists have to undertake personal therapy and self-experiential work as part of their formal qualifications for psychotherapy registration; their responses were informed by an average of 95 hours personal therapy (28 hours of which were CBT) and 31 hours group therapy (mainly CBT). The results support previous work in suggesting a specific role for self-experiential and reflective practices in the training of the interpersonal skills in CBT therapists (Bennett-Levy and Thwaites, 2007). Given the importance of the therapeutic relationship to outcome from CBT (Gilbert and Leahy, 2007), we suggest that more emphasis should be given to these methods of learning in countries where they are not already embedded in professional development practices. A further question revolves around what self-experiential/self-reflective practices are most appropriate for training which kind of interpersonal skill. To date most of the research in CBT has been on self-practice/self-reflection (SP/SR) (Bennett-Levy et al., 2001; Bennett-Levy et al., 2009). However, there are a number of other self-experiential strategies that may be appropriate for different types of interpersonal skill e.g. perceptual skills, relational skills, therapist attitude (see Bennett-Levy and Thwaites, 2007). Similarly, better specification of what "reflective practice" is, and how it is most appropriately used, will be helpful in developing more sophisticated and targeted CBT training and supervision (Bennett-Levy et al., 2009). Based on these preliminary data, a useful next step would be to establish an expert model of practice that can be tested against actual practice.

In summary, although to some extent limited by the nature of the data, the study does provide good support for the idea that different kinds of training/supervision strategy may be differentially useful for training different kinds of knowledge/skill. It suggests that trainers and supervisors need to have a flexible range of skills, and that they need to consider which particular learning methods might be most effective in relation to the learning objectives for the training (e.g. to increase trainees' declarative knowledge or procedural skills, or both).

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Appendix. Description of terms: the DPR model and training/supervision strategies

1. Declarative, procedural and reflective systems

Declarative system

The declarative system is an information or knowledge-based system. The essential aspect of the declarative system is that it is the *intellectual understanding* of ideas that we might write about, read about or talk about e.g. describing what are the key ingredients of CBT. At an extreme it is possible to have declarative knowledge that is purely abstract – for instance a lecturer could describe CBT in lectures by reading CBT texts, but lack the procedural skills (see below) to put the knowledge usefully into action in a clinical context.

Conceptual knowledge: refers to information or knowledge about conceptual aspects of CBT e.g. CBT generic models (e.g. maintenance cycles, developmental models), and models of specific disorders (e.g. depression, PTSD).

Technical knowledge: refers to information or knowledge about how to use different CBT techniques e.g. how to design a behavioural experiment or use a thought record.

Interpersonal knowledge: refers to information or knowledge about interpersonal aspects of CBT e.g. the importance of the collaborative relationship and empathy in CBT; their components; models of rupture repair etc.

Procedural system

Procedural skills, attitudes and beliefs are skills, behaviours and attitudes in-action (to be contrasted with a purely intellectual understanding); they are the behaviours we demonstrate in our clinical practice. They are often implicit (beliefs, assumptions, attitudes, stances, knowledge and skills), and are a manifestation both of our declarative knowledge of CBT and our knowledge and skills as human beings (the "person of the therapist".

Conceptual skills refer to the ability to use conceptual knowledge adaptively with patients in the clinical context e.g. to communicate and adaptively make use of the formulation.

Technical skills refer to the ability to make use of CBT technical skills in the clinical context e.g. provide the rationale for activity scheduling, use the activity schedule appropriately.

Interpersonal perceptual skills are attentional skills. They refer to the ability to focus in and pick up on the core elements of the patient's presentation. This includes attuning to the patient's state "in the moment"; focusing on verbal and nonverbal indicators that enable us to create and gather evidence for our formulation; and being mindful of our own state as well as our patient's.

Therapist stance, attitudes, beliefs and assumptions encompass values, beliefs, and assumptions about self, patients, and the therapy process – for instance, therapists' beliefs

about their efficacy, biases about certain types of patients (e.g. depressed or BPD), collaborative attitude, compassionate stance.

Interpersonal relational (communication) skills are active therapist communication skills, (in contrast to interpersonal perceptual skills which are receptive) for instance the expression of empathy, warmth or compassion, or the ability to implement rupture repair strategies.

When-Then plans, rules, procedures and skills represent the sophisticated, often seamless, combination of conceptual, technical, interpersonal skills seen in skilled therapists. When-then rules enable us, for example, to decide with which client, at which point in time in therapy, with which kind of problem, it is most appropriate to use what kind of intervention, under what circumstances. In skilled therapists, when-then rules are often automatized and implicit.

Reflective system

The **r**eflective system has no knowledge or skills base. It is a "process", called into action by particular circumstances (e.g. puzzlement, curiosity, mismatch between expectations and reality). It has certain components – focused attention on the problem, its mental representation, and a set of cognitive operations to address the problem (e.g. Socratic questioning). The DPR distinguishes between two kinds of reflection:

Self-reflection is the process whereby we reflect on our "internal world"; on whom we are as people; on our thoughts, beliefs, assumptions and attributes. Self-reflective material may have strong emotional content (e.g. "why did I get so irritated in that therapy session?"), which in some people leads to self-reflective avoidance. Self-reflection is inherently subjective. However to be reflective (rather than, say, ruminative), true self-reflection needs to have an objective quality – the reflector must apply cognitive operations (e.g. logical analysis, Socratic questioning, following trains of thought) to the self-material to conceptualize self-experience in a wider context (e.g. "I get particularly irritated by people who don't take responsibility for their actions, because in my family . . .")

General reflection is the process whereby we reflect on the external world e.g. reflect on progress in therapy – what is working, what is not; or reflect on how a new piece of information fits with the patient's formulation. General reflection has a more objective, detached quality than self-reflection; it may be quite an abstract intellectual process.

2. Training and supervision strategies

Modelling/demonstration refers to watching others, usually supervisors, teachers, videos demonstrating a particular strategy.

Reading refers to reading about CBT in books and journals

Role-play refers to doing role-plays, usually in the context of training or supervision, where we practise clinical skills from the position either of clinician or role-playing a patient.

Self-experiential work refers to being the recipient of CBT techniques. This may be in:

- personal therapy

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- CBT-based groups (may include mindfulness groups)
- practising CBT techniques on oneself as part of a formal training program (e.g. self-practice/self-reflection[1])
- using CBT strategies routinely in the context of everyday life
- doing self-experiential work in supervision or training workshops

Lectures/talks refers to the direct didactic communication of information about CBT in lectures or talks or as the didactic content of supervision or workshops.

Reflective practice refers to the activity of reflecting on our clinical experience, including our personal reactions, attitudes and beliefs; bringing our experience to mind, and analysing, problem solving and developing strategies to enhance our skills. It may be a self-supervision practice, and/or a practice facilitated by within clinical supervision.

[1]One difference between self-practice/self-reflection (SP/SR) and some of the other contexts is that reflecting on the implications of self-experience for clinical practice is explicitly built in to the SP/SR procedure

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