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Mastering Metacompetence

The Science and Art of Cognitive Behavioural Therapy

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In a professional kitchen, recipes are essential to creating consistent food, so that everyone takes the same path to the same place. But cooks who rely only on strictly codified formulas miss out on what is really important. Are the carrots more or less sweet, more or less tender? Is the ginger very strong, so that less should be used, or too weak for the amount specified? Or the thorniest problem: How long does it take something to cook, in a specific oven, on a specific day, with a certain set of ingredients?

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Introduction

Cognitive Behavioural Therapy (CBT) has grown up in a scientific tradition, which has been highly productive in the development of effective therapy. Research trials have given us a firm foundation for expanding the delivery of CBT, with the approaches delivered in the trials being reproduced in routine care to help a lot of people a lot of the time.

However, these trials can seem a long way from the consulting room when as a therapist you sit down with a unique client who has a unique set of difficulties and strengths. As a therapist you face a seemingly infinite range of options in your moment to moment decision making about what to do next as you try to deliver CBT in the most helpful way with this client at this point in time. A lot of the time you probably cannot be sure of the best options and have to proceed in the hope and faith that by working collaboratively with your client you will be able to negotiate a helpful way forward. This can feel more like an art than a science. Abilities required to apply therapy artfully, in a flexible and individually tailored way, have been named “metacompetences” in Roth and Pilling’s competence framework for CBT (Roth & Pilling, 2007).
There are significant pitfalls on the path between the science of CBT and its artful delivery. These include the risk of rejecting the research base because of a sometimes imperfect fit with routine practice, the risk of drifting away from effective methods in the belief that you are being helpfully flexible, and the risk of being overly rigid in your approach in an attempt to adhere to protocol.

We believe that the science and art of CBT can and should be brought closer together to help avoid these risks, and that the concept of metacompetent adherence gives us a framework for bridging this gap. Metacompetent adherence means making your therapy decisions based on evidence that clearly supports the practice and on a sound theoretical rationale where the evidence is less clear. Mastering metacompetence is a process of making explicit and enacting the if–then procedural rules of therapy adaptation and where possible drawing on the evidence base. These rules will not take away all uncertainty, however. The experience of not knowing is inevitable and perhaps desirable for therapists – human experiences require you to respond with humility, compassion and openness to learning as you deliver the best evidence-based intervention that you can.

The Science of CBT: Efficacy, Effectiveness and Evidence-Based Practice

Thousands of research trials have been conducted to address the question of whether and for whom CBT is useful, and how it can be most effective. The research base of CBT includes efficacy studies that test treatment in carefully controlled experimental conditions and effectiveness studies that test the interventions in routine care settings, as well as a plethora of other approaches including dissemination trials, single case research, dismantling studies and experimental designs. Of these approaches randomized control trial (RCT) evidence has traditionally been viewed as the “gold standard” methodology for establishing whether an intervention works (Kaptchuck, 2001). This scientific effort has been more intensive than for any other form of psychotherapy. Analysis of “what works for whom” clearly indicates CBT’s wide utility (Roth & Fonagy, 2005). As a consequence of this evidence, CBT has been recommended in evidence-based treatment guidance for a wide range of psychological difficulties (e.g., National Institute for Health and Clinical Excellence, 2009, 2011) and has become more widely available. In the United Kingdom, a national programme to increase access to psychological therapies for depression and anxiety disorders has seen an unprecedented expansion in the provision of CBT (Clark, 2011).

Both efficacy and effectiveness research shows that CBT works for many people with many types of difficulties and that research-based interventions can be applied in routine practice without dramatic reduction in effect. However, trial-based evidence will never resolve all of your dilemmas as a therapist about exactly what works for whom in which situations. This has led to a movement towards evidence-based practice (EBP) as an approach to guide clinical decision making, drawing on a combination of research evidence, clinical expertise and client preferences (Lillienfield, Ritschel, Lynn, Cautin, & Latzman, 2013).

Efficacy of CBT

Efficacy studies are those in which the treatment is carefully studied under “ideal” experimental conditions in a randomized controlled trial (RCT). Most reviews and meta-analyses have examined how CBT treatments have performed in efficacy studies.
These have themselves been examined in a larger review of meta-analyses of CBT RCTs across a wide range of disorders (Butler, Chapman, Forman, & Beck, 2006). Overall large effect sizes for CBT were seen for unipolar depression, generalized anxiety disorder, panic disorder, social anxiety disorder and post-traumatic stress disorder; moderate effect sizes for working with pain and anger; and CBT was as effective as behaviour therapy for obsessive compulsive disorder.

The degree to which results from RCTs translate into routine practice is a contentious issue (e.g., Westen, Novotny and Thompson-Brenner, 2004). RCTs typically have a single therapeutic focus (i.e., a particular psychiatric diagnosis/disorder), have an associated treatment manual, and are usually of a relatively brief fixed duration. This all makes sense scientifically, maximizing internal validity of the study, but has led to critiques of the evidence, suggesting that RCT conditions are too divorced from the realities of routine practice.

**Effectiveness of CBT**

Effectiveness studies measure the outcome of interventions provided in “routine” care settings. Effectiveness research indicates that it is possible to reproduce CBT RCT interventions in routine care settings with fewer controls and without greatly reducing their effects, although this is not guaranteed. A meta-analytic review of effectiveness trials of CBT for anxiety disorders showed that mean effect sizes were comparable to those in benchmarked RCTs (Stewart & Chambless, 2009). A similar meta-analytic review of effectiveness trials of CBT for depression showed a dilution of mean effect size in routine care, although the effect remained large (Hans & Hiller, 2013). Some effectiveness trials have even shown *larger* effects than in comparable RCTs (Ost, 2013). At one-year follow-up CBT for anxiety disorders in routine care has produced results almost equal to those of RCTs, whereas CBT for depression has not (DiMauro, Domigues, Fernandez, & Tolin, 2013; Gibbons et al., 2010).

The differences in effect of CBT in RCTs and routine care are not uniform and are likely to differ across the variety of treatments badged as CBT. Reasons for dilution of effect are not clear where these have been observed. Possible differences between RCTs and routine care include client characteristics, therapist and therapy characteristics. All may be relevant, but there is evidence that poorer quality control of therapy in routine settings may be at least as important in reducing effects as differences in the clients seen (Stewart & Chambless, 2009; Stirman, DeRubeis, Crits-Cristoph, & Rothman, 2005).

Despite the demonstrable value of CBT in routine settings as well as in RCTs, the evidence is currently insufficient to provide a comprehensive guide to the flexible, individually adapted delivery of CBT. The areas where research cannot be the only guide include numerous areas of complexity such as how best to intervene with co-morbid conditions (Shafran et al., 2009) and how best to deliver “flexibility within fidelity” (Kendall, Gosch, Furr, & Sood, 2008).

**Evidence-based practice**

There will never be enough research to tell you definitively what will work best for any particular individual client, and there will always be those who seek therapy from you who are “beyond the guidelines” developed during RCT trials. This situation leaves you unable to rely solely on RCT evidence to guide your practice as a therapist.
Evidence-based practice (EBP) offers the beginnings of a solution. EBP has been proposed in the United States as an approach to clinical decision-making, drawing on the “three-leg stool” of research evidence, clinical expertise, and client preferences (Spring, 2007). EBP has been distinguished from empirically supported treatments (ESTs) based on RCT evidence, which do not offer explicit specific guidance on adaptation and flexibility (Lilienfield et al., 2013). In the United Kingdom the concept of empirically grounded clinical interventions (EGCIs) also highlights the need for a broader approach to evidence-based practice than can be derived from RCT evidence alone; EGCIs are said to be derived from the sequence of clinical observation, experimental study and theory development, followed by treatment efficacy and effectiveness trials (Salkovskis, 2002). This approach values the role of experimentally derived theory as part of an evidence-based approach to intervention in the absence of specific evidence for what to do next.

As a therapist, EBP and EGCIs offer you a more comprehensive framework for making clinical decisions than trial evidence alone. However, both stop short of defining in detail the nature of the clinical expertise that you will need to draw upon and how you should put this into action.

The Art of CBT: Metacompetence

To be an evidence-based practitioner does not mean that you will always find yourself following a defined course of action or sequence of steps. In fact this is likely to feel like the exception rather than the rule in your therapy sessions. Much of the time you will base your actions on a combination of fundamental CBT therapy competences, your knowledge of specific CBT techniques and models, and an informed negotiation with your client about a way forward. The competences to enact this combination of factors into a coherent and effective therapy for anxiety disorders or depression have been defined very helpfully, drawing on an expert reference group and the manuals used in RCT trials that showed CBT to have a positive effect (Roth & Pilling, 2007).

Roth and Pilling (2007) identified five specific aspects of competence (see Figure 1.1). The first four outline competences of increasing levels of specificity to CBT and to CBT for particular problems, as follows:

Generic therapeutic competences: Required for the delivery of any psychological therapy, which include knowledge about mental health, ability to engage and assess clients, manage a therapeutic relationship and make use of supervision.

Basic CBT competences: The foundations of all CBT interventions, including knowledge of core CBT principles and abilities to agree goals collaboratively, jointly manage session structure and introduce a basic formulation using a cognitive-behavioural maintenance cycle.

Specific CBT techniques: A set of core cognitive and behavioural technical interventions, delivered within the context of Socratic dialogue and including, for example, the use of thought records, behavioural experiments, exposure and activity scheduling.

Problem-specific competences: The competences to deliver specific CBT intervention packages for particular disorders, for example the Clark intervention for panic disorder (Clark, 1986) or the Jacobson behavioural activation intervention for depression (Jacobson, Dobson, Truax, Addis, et al., 1996).
Figure 1.1 Competences for the effective delivery of CBT for depression and anxiety disorders (Roth & Pilling, 2007). © Crown Copyright (2007).
In addition, recognizing that skilled psychological therapy must be more than a combination of technical procedures, Roth and Pilling (2007) identified a fifth category:

**Metacompetences**: These are defined as a set of higher order competences that “focus on the ability to implement models in a manner that is flexible and tailored to the needs of the individual client” (p. 9). Most of their list was derived from RCT therapy manuals, with some based on expert consensus and some on research evidence. Metacompetences were generated in two areas: generic metacompetences, said to be employed in all therapies, and CBT-specific metacompetences. The listed categories of metacompetences are as follows, with a number of specific metacompetences in each category:

**Generic metacompetences**:
1. capacity to use clinical judgement when implementing treatment models
2. capacity to adapt interventions in response to client feedback, and
3. capacity to use and respond to humour.

**CBT specific metacompetences**:
1. capacity to implement CBT in a manner consonant with its underlying philosophy,
2. capacity to formulate and to apply CBT models to the individual client,
3. capacity to select and apply skilfully the most appropriate CBT intervention method,
4. capacity to structure sessions and maintain appropriate pacing, and
5. capacity to manage obstacles to carrying out CBT.

Roth and Pilling suggested that metacompetences may be thought of as procedural rules by which therapists can apply the methods of therapy in a theoretically coherent, but appropriately adapted and individually tailored way, as a good cook may use but adapt a recipe. For example, one generic metacompetence procedural rule is listed as:

[to] maintain adherence to a therapy without inappropriate switching between modalities in response to minor difficulties (i.e., difficulties which can be readily accommodated by the model being applied).

As with the rest of the competency framework the list of metacompetences is not presented as exhaustive or permanent. Metacompetences define your art as a therapist in implementing evidence-based practice, adapting empirically grounded clinical interventions to the circumstances that are presented to you. They encompass the process of translating research findings into practice. We think there is value in building on and expanding the list provided by the Roth and Pilling (2007) framework so that procedural rules for the art of therapy can be made more explicit.

### Three Risks to Effective Practice

There are risks in leaving the art of therapy as an implicit skill, assumed to be developed through experience or supervision, rather than something that is at least worth trying to define and make explicit. Without definition, lots of different forms of unhelpful
practice can be labelled as appropriate flexibility or adaptation. Therapist resistance to research-based evidence can provide fertile ground in which such anomalous practice can grow. Even those committed to evidence-based practice may drift away from effective approaches or become overly rigid in their approach and not recognize that what is happening is far from artful.

The risk of rejecting research evidence

Many therapists hold research evidence as a highly valued guide in practice, and CBT therapists are likely to value it fairly highly. However, this is by no means universal. A qualitative study of US practicing psychologists found that most ranked research evidence as lower than clinical experience and intuition in guiding their practice (Stewart, Stirman, & Chambless, 2012). In the United Kingdom, therapist disquiet about applying research-based evidence is highlighted by the active debate on the subject in the UK Clinical Psychology professional literature (e.g., Smail, 2006).

Scott Lilienfield and colleagues (2013) have provided a thoughtful and constructive review and commentary on the “resistance” shown by some therapy practitioners to evidence-based practice. They highlight the risks of rejecting research evidence, citing harmful medical practices in mental health such as the prefrontal lobotomy, which gained currency through the reliance on clinical expertise in the absence of research data. Without research evidence, as a therapist you are unable to tell the difference between therapeutic effectiveness and placebo effect or spontaneous remission. This opens the way to a proliferation of spurious treatments.

There are numerous therapist beliefs that may interfere with the delivery of EBP, including a belief that what seems to be the evidence of your own eyes is more valuable than the evidence of RCTs (Lilienfield et al., 2013). Beliefs that we have found to be particularly relevant that could impede the dissemination of effective CBT treatments include beliefs that the clients who enter RCTs are not representative of the population seen in routine care and that treatments derived from RCT manuals are prescriptive and inflexible (Shafran et al., 2009). These beliefs are examined in the light of the following evidence.

Belief 1: Clients entering RCTs are not representative of those seen in routine care, where there are more severe or co-morbid presentations

Co-morbidity is very common, with axis 1 conditions co-morbid with other axis 1 or axis 2 disorders in the range of 50 to 90 per cent (e.g., Kessler, Nelson, McGonagle, & Liu, 1996). It is true that RCTs do sometimes exclude participants with co-morbidity or as a result of severity, for example, if the client is actively suicidal. However, analyses of clients that are seen in routine care suggest that only 5 per cent would have been excluded from an RCT (Stirman et al., 2005). The most common reasons for exclusion in this routine care population would not have been more severe or complex presentations, but the clients in routine care not meeting minimum severity or duration criteria. More recent trials allow extensive co-morbidity without great reduction in outcome (DeRubies et al., 2005; Duffy, Gillespie, & Clark, 2007). Furthermore, a recent study of CBT for PTSD in routine care suggests that the majority of client characteristics that would have led to exclusion from an RCT made no difference to outcome of therapy. Large effect sizes were demonstrated even for clients that would have been excluded from an RCT (Ehlers et al., 2013).
Belief 2: Interventions delivered in RCT manuals are prescriptive and inflexible
Clinical guidelines used in RCTs have been developed for diagnostic categories, which can be limiting in complex cases. However, interventions within RCTs are usually based on an individualized formulation, based tightly on a specific model for the problem that is the focus of the trial. Flexibility is in fact inherent in RCT treatments using manuals and the use of manuals must always involve “flexibility within fidelity” (Kendall and Beidas, 2007). Even in trials participants will “strain the paradigm” (Markowitz et al., 2012).

In reality there are likely to be significant differences between trial conditions and routine care, and also some differences on dimensions of resourcing, therapist expertise and quality control (Roth, Pilling, & Turner, 2010; Stewart and Chambless, 2009) (see Table 1.1).

These differences in context, therapy and therapist factors suggest that rather than RCTs needing to be more like routine practice in order to provide realistic outcomes, we should endeavour to make routine practice become more like the conditions established in RCTs in order to achieve the best outcomes.

### The risk of therapist drift

In a similar vein, there is evidence that therapist “drift” from adherence to evidence-based protocols can lead to poorer responses to treatment. Glenn Waller has observed that therapists commonly “drift” away from pushing for behavioural change (a core element in component analyses of successful treatment) to a more discursive approach (Waller, 2009). This drift may be driven by a number of factors including therapists’ own beliefs, emotional reactions and safety behaviours. Waller proposed that the same factors may lead clinicians to rush to implement newer “third wave” therapies even when the best evidence-based therapy has never been tried.

A detailed analysis of video recordings of CBT for anxiety, confirmed that therapists frequently switched away from core methods such as exposure (Schulte and Eifert, 1993).
Therapists explained that they perceived a need to do something different when they faced relational difficulties in the session. More frequent switches in this direction were associated with more negative outcomes of therapy, whereas more frequent switches of direction towards implementing core methods were associated with more positive outcomes. Changes in treatment direction were not triggered by a lack of progress, but by therapists feeling less positive about their relationship with their client. In light of these findings it will be important for you to distinguish metacompetent flexibility and adaptation in your practice from drift or unhelpful changes of direction.

The risk of rigid application of technique

Lack of flexibility is another risk. Whereas therapists may sometimes switch away from core strategies when therapeutic alliance starts to deteriorate, therapists may equally sometimes be tempted to push even harder on rigid application of technique at these times, with negative effects on outcome (Castonguay, Goldfrid, Wiser, Raue, & Hayes, 1996). There is emerging evidence that flexing the structure of interventions in a planned way (including providing more sessions) and the focus of sessions (including “stressor sessions” when the focus of session is primarily on current life events) can help to maintain good outcomes in effectiveness studies (Galovski, Blain, Mott, Elwood, & Houle, 2012). However, there is little data on whether particular variations on the structure of therapy (e.g., duration or frequency of sessions) are superior to others (Haaga, 2004; Westen et al., 2004). You will need to walk a tightrope between adherence and flexible adaptation and avoid straying into drift, or overly rigid practice.

Bringing the Science and Art Together: Metacompetent Adherence

Telling the difference between unhelpful drift and helpful flexibility or between unhelpful rigidity and helpful adherence is highly challenging. This book aims to help with this. It does not propose an “anything goes” approach, but rather a way of introducing appropriate adaptation and flexibility in a measured and evidence-based way, when faced with particular circumstances. Metacompetence is not all about flexing or changing “normal” CBT. It is about knowing when and what to flex within the principles and theoretical underpinnings of CBT. Often metacompetence will guide a practitioner to stay on course with the usual evidence-based method rather than divert into less well-tested methods.

We make a distinction between (1) principles of CBT, including its conceptual underpinning and core methods such as formulation and collaborative empiricism, (2) tactics such as deciding how to set up opportunities for cognitive change or which problem to tackle first, and (3) techniques such as the use of thought records or behavioural experiments. A sporting analogy can be helpful here. In tennis, for example, principles are the rules of the game, tactics refer to how different game situations are approached when responding to a particular opponent, and techniques include the application of forehand, backhand, volley and serve.

In considering how to apply CBT to each unique circumstance you should consider these as a hierarchy of levels for adaptation. Technique can be adapted in a myriad of unique ways to suit individual needs and it will be appropriate to do this in every session with every client. Tactics may be reconsidered in the light of evidence that the usual
Principles: Tight

Competent Adherence

Tactics and techniques applied in the standard way as in RCTs. Suited to learning CBT and to specific problem types with specific protocols. Likely to be effective if there is a good fit between the specific approach and the specific problem/case. Practitioners with less experience should aim to practice in this manner.

Metacompetent Adherence

Appropriate adaptation of tactics and techniques using fundamental CBT principles. Suited to CBT for cases that don’t fit the usual guidelines. Different to therapist “drift”; as motivation to adapt is theory and evidence-based. May be effective, more likely to be needed with complex cases and easier with greater clinical experience.

Principles: Loose

Rigid Practice

Tactics and techniques applied rigidly without recourse to principles. When first learning CBT treatments practitioners may find themselves practicing in this manner – just thinking about what to do next without properly basing this on a formulation. Can be aversive for clients and have negative impact on outcome.

Unfocused Practice

Unfocused tactics and erratic use of technique, without recourse to principles. This is the culmination of therapist “drift”; Does not resemble CBT and likely to be less effective.

Figure 1.2 Different styles of CBT practice associated with loose/tight application of CBT principles, tactics and technique. © Adrian Whittington and Nick Grey (2013).

tactics are unsuitable, but principles should be held firm in all cases, except where there is evidence that another form of therapy or intervention may be more helpful.

How closely we hold to each of these aspects of CBT may be “tight” (more rigidly held) or “loose” (more flexibly held). These ideas are partly inspired by Cory Newman’s excellent book on core competencies in CBT (Newman, 2012). Various degrees of tight/loose alignment to principles, tactics and technique can occur and can explain different styles of practice commonly encountered (see Figure 1.2).

According to this framework therapists aim to provide competent CBT, and then further to adapt and flex it as appropriate, by employing metacompetences. Some therapists, particularly when inexperienced, may fall into the trap of rigid practice, and others, however experienced, can drift into unfocused practice, sometimes mistaking this for metacompetence.

Many commonly occurring complexities add to the challenge of providing CBT (e.g. Westbrook, Mueller, Kennerley, & McManus, 2010). These include:

1. A mismatch between how client and therapist understand the problem (e.g., a client who assures you they do not have a drink problem despite objective signs that they are alcohol dependent).
2. Co-morbid Axis I problems (e.g., PTSD with depression)
3. Co-morbid Axis I and Axis II problems (e.g., Depression in the context of Borderline Personality Disorder)
Metacompetence will be especially important in addressing these complexities, which often take us beyond the typical textbook application of CBT.

**Conclusion**

Providing CBT is inevitably both a science and an art. Metacompetence offers a framework for defining and helping to make explicit some aspects of the artistry of CBT. Metacompetent adherence is a way of bringing science and artistry together to deliver more effective therapy. This approach can reduce the risk of drift or unhelpful rigidity in practice and help you to resolve dilemmas that you will face in delivering CBT every day.

Metacompetence consists of numerous procedural rules for applying CBT in different specific circumstances. Roth and Pilling (2007) identified a number of desired outcomes from implementing these rules (e.g., “formulate and apply CBT models to the individual client”). In this book we attempt to uncover some of the specific rules by which these outcomes might be achieved, based on best evidence and the experience of experts in the field. The book reviews the foundations of CBT competence on which metacompetence must be built, establishes how you should adapt and flex the delivery of CBT in the face of complex presentations of anxiety and depression, and serves as an introduction to ways of meeting the additional needs of other specific client groups. It also guides you in how you might continue to learn additional procedural rules as you go forward in your practice.

**Procedural Rules**

- Always look first to whether you are competently delivering evidence-based approaches before you attempt variations on these.
- Do not get thrown off course by myths that evidence-based practice and evidence from randomized controlled trials is not relevant. Use this evidence as a starting point for competent practice.
- Beware the risks of therapist “drift” from proven approaches. Where you adapt or flex CBT, do so based on the principles of CBT and evidence-based practice.
• Avoid overly rigid adherence to particular techniques in the face of difficulties.
• Aim for metacompetent adherence, adhering to the principles and conceptual underpinnings of CBT while allowing appropriate flexibility in tactics and techniques of therapy.
• Set about collecting explicit “procedural rules” for metacompetent practice. You can start by reading this book and attempting to put the rules you read about into practice.

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Note

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References


