

PART I

# Overview

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# 1

## Case Formulation: A Review and Overview of This Volume

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Case formulation is a basic clinical skill for many mental health professionals. It is often included in professional training (Page and Strizke, 2006; Page, Strizke and McLean, 2008) and continuing education for many mental health professionals (Kendjelic and Eells, 2007; Kuyken *et al.*, 2005; Sim, Gwee and Bateman, 2005). Various professional bodies, such as the British Psychological Society (British Psychological Society Division of Clinical Psychology, 2000, 2001), the American Psychiatric Association (2004) and the American Psychological Association (APA) (2005), identify this as a professional competency that practitioners should have and the professional training courses should teach. Within cognitive-behavioural approaches to mental health, case formulation is seen as a core skill for all practitioners. The first part of this chapter provides an overview of what is meant by case formulation. The second part of the chapter describes how authors in this book made their case formulation and highlights some of the links and contrasts across different formulations in this book.

### CASE FORMULATION

#### Rationale and importance of case formulation

Clinicians must determine which treatment is best for which client. There are now a very large number of treatments available for all the common mental

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health disorders. Clinicians may well be perplexed as to which treatment to select for each particular client.

One approach to solve this problem is to use psychiatric diagnosis to predict treatment. The terms used to describe both pharmacological and psychological treatments often refer to diagnosis. Psychotropic medications are called ‘anti-depressants’, ‘anti-psychotics’ and ‘anxiolytics’. Psychological treatments also often refer to diagnosis, for example when we refer to treatment groups as ‘anxiety management groups’ or ‘support groups for eating disorders’ and so on. Treatment algorithms, randomized controlled trials (RCTs), reviews of the outcome literature and reviews of evidence-based treatment, such as Cochrane reviews, National Institute for Clinical Excellence guidelines and the APA guidelines (APA, 2005), all are organized around diagnostic categories. Many mental health advocacy groups are also organized around specific diagnostic groups. Thus, the notion that diagnosis predicts effective and ineffective treatment is pervasive. This model suggests that diagnosis 1 predicts that treatment A will be relatively effective for this diagnosis and treatment B will be relatively ineffective for this diagnosis, and diagnosis 2 predicts that treatment A will be relatively ineffective and treatment B will be relatively effective for this diagnosis. Thus, we might recommend anti-depressants for people with Major Depression, but not for a Psychotic Disorder. Likewise, we would place people with anxiety disorders in an anxiety management group, not in a support group for people with eating disorders. This model is based on an interaction between diagnosis and treatment.

This model of predicting treatment efficacy has many limitations. First, most outcome research using RCTs does not address the question of diagnosis by treatment interaction. Rather, most RCTs merely compare one treatment with some other procedure, such as a waiting list control, or, more rarely, some placebo or perhaps a second treatment. Researchers select participants to ensure that they all meet the *same* diagnosis. Thus, these kinds of RCTs permit us to conclude that treatment A may be effective for diagnosis 1. They tell us nothing about the effectiveness of this treatment for diagnosis 2 and nothing about whether this treatment is the *most* effective treatment for this diagnosis. Wilson (1996) proposed a contrary argument. He has noted that some standardized, manualized treatments for eating disorders are highly effective. He suggested that treatment determined by diagnosis might be highly desirable because the clinician can learn one highly effective treatment procedure to a high degree of proficiency. Further, there may be little room left for individualization of treatment – which in any case might be unreliable and capricious – to improve over this standard treatment. (Ghaderi [2006] presented some evidence to the contrary.)

A second limitation to this model of predicting which treatments might be effective is that response to treatment is highly varied. RCTs emphasize statistical significance – changes that are unlikely to be due to chance – and changes in the score of the average, but non-existent, subject. Statistically significant results may emerge from many patterns of response to treatment. For example, a statistically significant result might occur if 50% of the treatment group have a large, positive response to treatment, 25% have no response and 25% have a modest *negative* response to treatment, if the experiment has a large enough number of participants and if the dependent measures are sufficiently sensitive. A statistically significant result may also emerge if most of the participants make a modest improvement but one that has no practical significance for any particular person. The average client does not exist: the clinician will never treat this mythical person. The clinician treats specific clients. Even when there is a strong evidence base for a particular treatment, it may be unclear at the outset of treatment if the clinician is working with someone who will respond positively, not respond or respond negatively to this particular treatment.

A third limitation is that clinicians frequently work with clients who have apparently already had standard, diagnosis-based treatment and who did not respond to any meaningful degree. For example, it is common for clinicians to work with people who have taken anti-depressants or anxiolytic medication for many years and still have significant problems; indeed their failure to respond to standard treatments is often the reason for referral. Further, after standardized psychological treatments, such as anger management, cognitive behaviour therapy for depression and so on, a significant proportion of clients have residual problems, did not respond or responded badly to standard treatment.

A fourth limitation in diagnosis predicting the most effective treatment for each client is that many clients meet diagnostic criteria for more than one diagnosis. When a clinician works with a client who meets diagnostic criteria for Major Depression, Substance Abuse and Generalized Anxiety Disorder, which of these three diagnoses predict the most effective treatment for this client? If all three predict effective treatments, in which order should the clinician implement these treatments? Will effective treatment of the Major Depression result in a generalized improvement in the client's functioning, or will treatment of the Generalized Anxiety Disorder result in the broadest spread of treatment effects?

The ability of psychiatric diagnosis to predict the most effective treatment depends on the reliability and validity of that diagnosis. The developers of the third edition (revised) of the *Diagnostic and Statistical Manual* (DSM) trumpeted its arrival as a triumph of science (Kutchins and Kirk, 1997). The number

of psychiatric diagnoses has expanded considerably with each edition of DSM (Houts, 2002) and the developers of DSM did not conduct reliability trials for almost all the hundreds of diagnoses in DSM-III-R (Kutchins and Kirk, 1997). Where researchers did conduct diagnostic trials, they were conducted *after* the diagnostic criteria had already been set; thus, the results of reliability trials did not inform the development of the diagnostic criteria. Indeed, careful examination of the reliability of DSM-III-R revealed that the reliability of the new diagnostic criteria may not have been very much different from the reliability of the old criteria (Kutchins and Kirk, 1997). In any case, this may be of limited relevance, since the reliability of diagnosis by routine practitioners may have little to do with the diagnostic practices of eager, well-trained government-funded researchers. Some structured clinical interview procedures may result in quite high reliability. However, most clinicians do not use these assessment methods routinely. In any case, the *validity* of these measures to differentially predict an effective treatment is still little researched.

Clinicians may often work with clients with rare, idiosyncratic, subclinical problems or other problems that do not meet diagnostic criteria. In these situations too, psychiatric diagnosis may be of limited use to predict treatment.

Finally, some clinicians often feel that they have something more to offer than skilled, but technocratic, application of diagnostic algorithms and manualized treatment. Whether true or not, many clinicians believe that their input into understanding the case and designing treatment for each individual client has something to contribute to treatment.

These limitations to predict treatment based on diagnosis, if true, are serious. Consequently, clinicians and professional training standards have argued that case formulation is a better way to guide selection of the most effective treatment. So what is case formulation?

### **Definitions of case formulation**

There are many definitions of case formulations. Eells (2007a) defined case formulation as

a hypothesis about the causes, precipitants, and maintaining influences of a person's psychological, interpersonal and behavioral problems . . . [which] helps organize information about a person, particularly when that information contains contradictions or inconsistencies in behavior, emotion and thought content . . . it contains structures that permit the therapist to understand these contradictions . . . it also serves as a blueprint guiding treatment . . . It should help the therapist experience greater empathy for the patient and anticipate possible ruptures in the therapy alliance . . . The nature of this hypothesis can vary widely depending on which theory . . . the clinician uses . . . (p. 4)

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Eells' definition is deliberately broad and attempts to avoid any theory-specific constructs. His definition specifies that case formulations serve several functions, such as unifying information concerning development and maintenance of the presenting problems, resolving conflicting information, guiding treatment and improving the relationship between the therapist and client.

Others have defined case formulation from the perspective of specific theories. For example, McWilliams (1999) noted from a dynamic formulation that when her supervisor first asked her to make a dynamic formulation of a case she should

suggest how the person's symptoms, mental status, personality type, personal history, and current circumstances all fit together and make sense . . . (p. vii)

Later, she noted that we put all the assessment information into

a narrative that makes this human being and his or her psychopathology comprehensible to us, and we derive our recommendations and our way of relating to the client from that narrative . . . (p. viii)

Thompkins (2007) gave this definition of case formulation from the cognitive-behavioural perspective:

[A] hypothesis about the patient's disorders and problems, and which is used as the basis for intervention . . . it is parsimonious; that is, it offers the minimum detail necessary to accomplish the task of guiding treatment . . . (p. 291)

Turkat (1990) defined problem formulation from a behavioural perspective as

(1) [a] hypothesis about the relationship among the various problems of the individual; (2) [h]ypotheses about the aetiology of the aforementioned difficulties; (3) [p]redictions about the patient's future behaviour . . . (p. 17)

From an eclectic perspective, Weerasekera (1996) wrote that

'formulation' is defined as a provisional explanation or hypothesis of how an individual comes to present with a certain disorder or circumstances at a particular point in time . . . [that] include[s] biological, psychological and systemic factors . . . (p. 4)

As these definitions illustrate, researchers and clinicians have offered definitions of case formulation from an atheoretical stance and from the perspective of both specific and eclectic approaches to case formulation. These definitions come from very different authors. Yet, they share several features. First, most of them emphasize that a formulation abstracts out key features of the case. A formulation is not a list, chronology or summary of all the details of the case. Persons and Thompkins hit the nail on the head when they suggested that a formulation should have enough detail to guide treatment, and, by implication, nothing more. A second related idea is that case formulations should integrate all the information about the case into a unified and related idea or set of ideas. The formulation should tie together the onset, development, maintenance of the problem(s) and should link these ideas to the treatment that should grow out of and relate to the formulation. Third, these definitions note or imply the tentative and provisional nature of case formulation. A case formulation is only based on what the clinician knows so far. Further assessment, events, response to treatment and relapses may all cause a formulation to be revised in some potentially significant way. For example, Haynes and O'Brien (2000) pointed out that formulations have boundaries. Finally, one of the key functions of case formulation is to guide treatment. Specifically, case formulations should predict individually designed treatments that will be more effective than treatments that would otherwise have been implemented.

Different approaches to case formulations share these several features. However, the authors' differing theoretical perspectives result in very significant differences between approaches to case formulation. Specifically, approaches to case formulation differ in terms of the following: (1) the nature of the behaviour that therapy should change; (2) which independent variables are important in a case formulation; (3) the role of history in a case formulation; (4) how to use the case formulation with the client; (5) the role of psychiatric diagnosis, if any, in case formulation; and (6) how prescriptive the definitions of case formulation are (see Table 1.1).

### **Current status**

There are now at least two handbooks and many individual volumes available on case formulation. Most are cognitive and cognitive-behavioural approaches to formulations, although this literature does address all major theoretical approaches. For example, Eells' *Handbook of Psychotherapy Case Formulation* (Eells, 1997, 2007b) presents case formulation and many examples of case formulation from psychoanalytic, eclectic, cognitive, cognitive-behavioural and behavioural perspectives. Hersen and Rosqvist (2008) published a large



**Table 1.1** A summary of different theoretical orientations in psychology and how they may apply to various aspects of case formulation.

Orientation	Relevant variables	Cause of behaviour	Role of client history	Assessment	Prototypical treatment	Therapeutic relationship
Behavioural	Observable behaviour, including what people do, say and feel is central. Thoughts and feelings are important too since they are private behaviour. Private behaviour is accessible only to one person. Self-report of behaviour and other information are regarded with suspicion, as such verbal behaviour is often controlled by other people's behaviour and may be inaccurate reports of both public and private behaviour	The current environment controls public and private behaviour. Controlling variables for respondent behaviour include unconditioned and conditioned stimuli. Controlling variables for operant behaviour include reinforcer deprivation and satiation, antecedent stimuli and contingencies. Private verbal behaviour, such as rules, private antecedents and contingencies may also be important, but may be hard to access and change	The current environment controls behaviour because of the organism's learning history. History may be less important than the current environment as only the current environment can be modified to change behaviour	Focuses on reliable observation of behaviour and experimental manipulation of independent variables to detect reliable functional relationships between the environment and behaviour. Self-report data alone is insufficient	Teaching skills, other behaviour, including self-regulation, as alternatives to problematic behaviour and poor self-control repertoires. Direct treatment of the target behaviour may also take place, for example, through operant extinction, and through changing the behaviour of relevant others, such as family members and friends	The therapist must establish himself or herself as a powerful source of reinforcement by demonstrating that his or her advice results in client relief from aversive behaviour and situations. The therapist should carefully teach the client more effective ways of behaving and self-regulation

(Continued)

**Table 1.1** (Continued).

Orientation	Relevant variables	Cause of behaviour	Role of client history	Assessment	Prototypical treatment	Therapeutic relationship
Cognitive	Current problems and current thinking are the focus of cognitive therapy. The therapist tries to infer patterns of faulty thinking, such as attributions and negative automatic thoughts, and cognitive structures that cause the presenting problem(s)	Client's current problem behaviour is caused by faulty cognition. This faulty thinking may be precipitated by a stressful event. The clients may have learned these inappropriate cognitions earlier in life	The client may have learned maladaptive ways to think and stressful life events may have precipitated current maladaptive patterns of thinking	The therapist should identify the faulty patterns of thinking, beliefs, attributions, perceptions and other faulty cognitive processes. This may be done by carefully interviewing the client, questionnaire measures of thinking and attributions, self-recording and behavioural experiments to disconfirm faulty thinking	Maladaptive patterns of thinking are changed by teaching the client to identify them, retraining thinking and conducting behaviour exercises to challenge maladaptive beliefs. Skills teaching and some forms of exposure therapy may also be included	The relationships should be supportive, collaborative, open and active in order for the client to participate in assessment, formulation and treatment

<p>Psychodynamic</p> <p>The current problems are symptoms of an underlying conflict that likely dates back to infancy or early childhood. The relationship between the client and others, including the therapist and client, may mirror historical relationships, such as those with caretakers. Therapist feelings concerning the client may also provide valuable insights</p>	<p>Historical trauma, often early in development, and subsequent defences cause the presenting problem</p>	<p>Client history is central to case conceptualization and treatment. Only when the original trauma is uncovered and revealed through interpretations will real change in the current problem occur</p>	<p>Assessment focuses on whether the client is suitable for psychodynamic psychotherapy, on interpreting current symptoms and defences in order to uncover the original trauma</p>	<p>Client and therapist meet together individually. The therapist is a reflective sounding board for the client, reflects what the client says and does and occasionally makes interpretations. The transference of client feelings and therapist feelings about the client are important. The therapist reveals little of himself or herself</p>	<p>The relationship is the vehicle for therapeutic change. This relationship may become very significant to the client. Therapist's feelings regarding the client may be useful in understanding the client's problems</p>
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**Table 1.1** (Continued).

Orientation	Relevant variables	Cause of behaviour	Role of client history	Assessment	Prototypical treatment	Therapeutic relationship
Psychiatric	Symptom clusters that correspond to mental illnesses; psychiatric histories that are typical of different mental illnesses	Presenting problems are symptoms of mental illnesses described in manuals of mental disorders caused by biochemical disorders of the brain, genes and their interaction with the environment	A client history is usually taken. Sometimes a history may be characteristic of a particular mental illness and may be a part of a comprehensive psychiatric case formulation	Assessment typically takes place during an interview with a psychiatrist. Assessment may also include record reviews, questionnaires and input from team members	Mental illnesses are treated primarily with psychotropic medications. Other treatments are adjunctive, but may be considered	The psychiatrist is a physician who like other physicians treats illnesses. The relationship should be professional, respectful and supportive. The psychiatrist may educate the client about his or her illness, medication and the side effects of medication
Eclectic	'Eclectic' refers to several approaches to case formulation that combine perspectives from two or more schools of therapy. Hence, many variables may be relevant	Many causes of behaviour may be considered, such as biological, learning, cognition, interpersonal and psychodynamic and so on	If this particular version of eclecticism includes perspectives that incorporate a school of psychology that addresses history than it may be important	Many forms of assessment may be included. Some forms of eclecticism include methods to combine assessment information from different schools of psychology	Many treatments are possible. Some forms of eclecticism borrow interventions from many schools of psychology and may also include psychiatric interventions, such as psychotropic medications	This varies from one form of eclecticism to another, but many forms of eclecticism include the therapeutic relationship as being important in various ways

handbook on case conceptualization and treatment in adults which covers all the common DSM diagnostic categories and includes many examples of case formulation, largely from a cognitive-behavioural perspective. Sturmey (2007) also provided examples of behavioural approaches to conceptualization and case formulation of all the major DSM-IV diagnoses. There are also several other smaller volumes that also focus on cognitive and cognitive-behavioural approaches to case formulation (Bruch and Bond, 1998; Gauss, 2007; Nezu, Nezu and Lombardo, 2004; Persons, 1989; Tarrier, 2006; Tarrier, Wells and Haddock, 1998). These cognitive and cognitive-behavioural approaches to case formulation are one of the most active areas of publication on case formulation at this time. Others have published on case formulation from a psychotherapeutic (Horowitz, 1997; McWilliams, 1999), behavioural (Cipani and Schock, 2007; Dougher, 2000; Turkat, 1985, Skinner, 1953, 1971; Sturmey, 1996, 2007, 2008) and eclectic perspectives (Weerasekera, 1996). In the specific area of functional assessment and analysis of behaviour problems, where behavioural approaches are sometimes mandated in American law, there are also specific resources on case formulation to address this need in both special education (O'Neill *et al.*, 1997) and mainstream settings (Umbreit *et al.*, 2006; Watson and Steege, 2003). There are also individual examples of case formulation scattered throughout clinical journals, including some dedicated to case studies and some, such as *Cognitive and Behavioral Practice*, that have presented case formulations with subsequent commentaries and responses by the original case formulation authors.

Most of these books present only one theoretical perspective. Several books, Eells (1997, 2007b) in particular, present case formulations from different perspectives, but in order to contrast different approaches to case formulation the reader must compare formulations across different cases in different parts of the book. No books directly contrast different approaches to case formulation. Thus, educators providing professional training in case formulation, students and practitioners lack resources to learn about these differences.

## THE CURRENT VOLUME

I designed this book to address this gap. The aims of this volume are to (1) provide models of different approaches to case formulation, (2) highlight the differences in approaches to case formulation, (3) provide models of case formulation for common clinical problems that were varied in terms of the referred problem, population and context, (4) identify the significant issues in alternate approaches to case formulation, and (5) stimulate debate on alternate approaches to case formulation.

### The authors' tasks

I did not ask authors to write literature reviews on case formulation. Several are already available (e.g. Tarrier and Calem, 2002). These reviews have many virtues, but they do not meet the needs identified above. I therefore devised the following format. First, one or more authors wrote a case description. Each case description was structured with standard headings. I provided some guidelines as to what authors should write in each section. Table 1.2 summarizes these guidelines. Once the authors had completed their case studies, I sent them out to two new sets of authors who independently wrote formulations of the case. Again, I provided predetermined sections and guidelines for each of the authors to follow. Table 1.3 summarizes these guidelines. I gave formulation authors these standard guidelines to facilitate comparison of the formulations by the commentator authors and readers. In order to allow a

**Table 1.2** The case study guidelines given to authors of the case study chapters.

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The word limit is 4000 words: there are no exceptions! Please use the following standard headings in your chapter

1. *Presenting complaint.* Describe the main presenting complaints and any other problems the client presents with. If relevant describe the reasons that the client would give for seeking help. Do not organize the material too much. Let the case formulators in each chapter do that
  2. *Client demographic data.* Briefly describe the client's relevant demographic data
  3. *Client demeanour and personal appearance.* Describe the client's demeanour, behaviour, affect and personal appearance in so far that it is relevant to the case
  4. *Client current lifestyle.* Describe the client's current lifestyle including education, work or other daily patterns of living, relationships and social support, family status and the impact of the client's problems on these factors. Include information on those variables that are likely to be of interest to the two authors writing the case formulations. If the client currently received treatment for the presenting problems, describe them
  5. *Client history.* Describe the client history close to the way the client would describe his or her own history. Again, include information on those variables that are likely to be of interest to the two authors writing the case formulations. If there are previous treatments describe them and the client's response to these treatments
  6. *Client goals.* If the client has goals for therapy state them in the client's own terms
  7. *An event.* Describe an event that might occur during assessment or early during therapy that might confirm a current formulation or give rise to an opportunity to reformulate
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**Table 1.3** The guidelines for authors writing case formulations.

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4500 word limit – no exceptions! Each case formulation chapter will use a standard series of headings used to illustrate what is important to each approach to case formulation. The aim is to not only show your formulation, but how and why you arrived at this formulation. These will include the following sections

1. *Theoretical orientation and rationale.* State the theory that frames your formulation. State the rationale for your case formulation
  2. *Relevant and irrelevant variables.* Identify the relevant and irrelevant variables in your case formulation. Justify your selection. Which variables do you give most weight to and why?
  3. *Role of research and clinical experience.* What is the role of research versus clinical experience and intuition in this approach to case formulation? State very briefly what research, if any supports this approach
  4. *The formulation.* Concisely state your formulation
  5. *History.* Describe the status you give the client's history and its significance, if any, in your formulation
  6. *Current factors.* Describe the status of current factors in your formulation of the case and their significance, if any, in your formulation
  7. *Treatment plan.* Describe the treatment plan implied by your formulation. Describe how this plan is linked to your formulation. Describe how your formulation changes the treatment plan from a standard treatment plan to an idiographic treatment plan for this particular person
  8. *The event.* Your case description includes an event. Interpret that event in the light of your formulation. Does this event confirm your formulation or cause you to reformulate. Justify your decision. Does the event and its associated reformulation, if any, change your treatment plan?
  9. *Other issues.* Are there any other issues in formulating this case?
  10. *Summary.* Briefly summarize your formulation in 200 words
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clear examination of differences in approaches to case formulation, I selected authors from different and contrasting theoretical perspectives. Finally, once these authors have completed their two independent formulations, I gave the case study and the two formulation chapters to another author and asked him or her to comment upon the two independent formulations. Again, I attempted to find commentator authors from theoretical perspectives that differed from those of both authors of the two case formulations. Table 1.4 summarizes the commentators' guidelines.

In selecting authors and commentators, I attempted to address some common theoretical and clinical questions and to address potential strengths and weaknesses of different approaches to case formulation. (The final authors also reflect the vagaries of recruiting authors.) For example, the two formulations of the depression case contrast cognitive-behavioural with behavioural

**Table 1.4** The guidelines for authors writing comments.

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The main purpose of the comments is to highlight the similarities and differences between the two case formulations. This can relate to the variables that are considered relevant – the target behaviours, proximate and distal causes – the role of research versus experience and intuition, the role of the therapeutic relationship, the kinds of treatment implied by the formulation and so on

There is no specific format or headings for the comments chapters

When writing your commentary, bear two things in mind. First, you may disagree with one (or both) of the case formulations. If you do have critical comments make them respectfully and in a way that addresses the ideas, not the author. Second, the word limit you have is very tight – only 3000 words. Stick to it! You can only do this by being quite concise and structured in your comments

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approaches to formulating depression. These are two common approaches which have some similarities, but also have fundamental differences. Likewise, the contrast of a cognitive analytic therapy formulation with psychodynamic formulation allows the reader to consider the merits and limitations of one eclectic approach to case formulation, which includes elements of psychodynamic approaches, with another purely psychodynamic approach. Sometimes the differences between different approaches to case conceptualization are said to be modest and make little fundamental difference to treatment. However, the contrast between psychodynamic and cognitive-behavioural approaches to case formulation of anger in a man with intellectual disabilities is quite remarkable. One places the causes of the problem largely in the past and one largely in the present; one results in a treatment plan consisting of weekly psychotherapy sessions and one results in a 16-week anger management plan that includes skills teaching and cognitive therapy. Table 1.5 summarizes these chapters and their theoretical orientations.

### Overview of the volume

Two chapters frame the five sections on case formulation. This chapter describes the general issues in case formulation and the final chapter by Tracy Eells reacts to the entire book, identifies emerging themes and suggests future directions for research. I invited him to do so because of his extensive experience in editing the two editions of his *Handbook of Psychotherapy Case Formulation* (Eells, 1997, 2007b) and extensive research in case formulation, including research on professional training in this area (Eells, Kandjelic and Lucas, 1998; Eells and Lombart, 2003; Eells *et al.*, 2005).



**Table 1.5** A summary of the theoretical orientations and authors in Sections 1–5 of the book.

Case	First formulation	Second formulation	Commentary
Depression Brannigan and Williams	Cognitive Newman	Behavioural Lejuez <i>et al.</i>	Cognitive-behavioural Williams
Psychosis DiMech, Swelam and Kingdom	Psychiatric Casey	Behavioural Wilder	Anti-psychiatry/cognitive Bentall
Eating disorder Newton	Eclectic Weerasekera	Behavioural Lappailanen <i>et al.</i>	Cognitive Cooper
Hoarding in older adults DeVries	Cognitive Dunn	Psychodynamic Barrett	Cognitive-behavioural and cognitive analytic Howells and Jones
Anger in a person with intellectual disabilities Benson	Psychodynamic Beail and Jones	Cognitive Willner	Behavioural Didden

### *Depression*

Depression is often referred to as the ‘common cold’ of mental health; hence, a chapter on formulation of depression is a good place to begin. Brannigan and Williams describe a middle-aged woman with low mood, lack of confidence, sleep disturbance and physiological discomfort, such as tension and tachycardia. She also has poor relationships with her family and at work. Her husband works away from home a lot and her children have left home: the nest is mostly empty and an affair is on the near horizon. She has a history of high academic achievement and professional training, but, after giving up her career to raise her family, she cannot get back into a job commensurate with her training. Further, she performs poorly in this job that is well below her capacity because of repeatedly checking her work. Thus, in two areas that are of key importance to her – her family and profession – she does poorly.

Cognitive and cognitive-behavioural approaches to case formulation now dominate clinical practice and educational training and there is an extensive literature on the effectiveness of cognitive and cognitive behaviour therapy with depression. Yet, behaviourism has a long history of formulating and treating depression (Ferster, 1973; Lewinsohn, 1974; Skinner, 1953, 1971) and some research suggests that the mechanism behind cognitive and

cognitive-behavioural treatment of depression is behavioural activation, rather than cognitive restructuring. For example, Jacobson *et al.* (1996) conducted a component analysis of cognitive-behavioural treatment of depression. They found that, despite greater therapist allegiance to cognitive therapy, behavioural activation was more effective than cognitive therapy. Further, this was true for several outcome measures, including cognitive measures. Recently, there has been a revival of interest in behavioural activation for treatment of depression. For example, a recent meta-analysis of behavioural activation based on 16 RCTs with 780 subjects found a large effect size for behavioural activation, no evidence of loss of effect at follow-up and a small, non-significant difference in favour of behavioural activation over other psychological treatments (Cuijpers, van Straten and Warmerdam, 2007). Thus, the first formulation by Newman is a Beckian cognitive formulation of this case and the second is a behavioural formulation by LeJuez, Hopko and Hall Brown.

Newman's cognitive formulation focuses on negative automatic thoughts, such as 'I am fat'. These thoughts result from the client's assumptions and schemata, such as 'flaws are intolerable', which appear to date back to the client's early learning history. The therapist and client work collaboratively and empirically to make this formulation. Research and clinical experience are both important and this formulation would use many kinds of data, such as weekly monitoring of mood using psychometric instruments, and activity logs to monitor specific problems, such as alcohol use. The formulation notes that loneliness, avoidance of disappointing others, cognitions about abandonment are all key factors in understanding this client's problems. The treatment implied by this formulation includes addressing avoidance, cognitive restructuring for both negative automatic thoughts and core beliefs, teaching communication skills using role play and preparation for upcoming potentially difficult situations and regular homework assignments. Newman remains neutral on the issue of the affair and would offer discussions about it as well as opportunities to improve her marital relationship.

LeJuez, Hall Brown and Hopko's behavioural formulation of this case focuses on the loss of contingent reinforcement for healthy behaviour, especially in the areas of family role and relationships. They use problematic thoughts to identify target behaviours that produce these problematic thoughts, for example, behaviour that results in lack of confidence. Their treatment plan begins with building a good therapeutic relationship, identifying the functions of depressed behaviour in order to subsequently increase valued activities that serve the same function as depressed behaviour, such as maintaining an important role in her daughter's life in a healthy fashion. This is done by identifying long-term valued goals, small weekly goals and daily self-recording of those small goals. Since family roles are so important to Sally, they explicitly

argue against the affair and instead recommend interventions to strengthen the marital relationship. LeJuez *et al.* note that progress should be evaluated comprehensively, not only in terms of increased activity.

Williams was one of the authors of the case study and a noted expert in cognitive behaviour therapy, so his commentary on the two formulations is especially pertinent. He begins by noting the similarities in these two approaches to formulations, such as an emphasis on strong therapeutic alliance, active collaboration between client and therapist, empiricism, both in terms of an evidence base for selection of treatment and for developing the formulation and evaluating treatment with the client, a focus on current functioning and emphasis on change outside of the weekly therapy session. The formulations differ in the way they conceive of cognitions, the role of other people, and how to handle the potential affair. Some of the issues he identifies include how to use a formulation with a client, including presenting the information in a readable, readily interpretable manner, and a relative neglect of issues such as client strengths, religious belief and potential medical issues in both formulations.

### *Schizophrenia*

Kingdom, Swelam and DiMech describe a case of psychosis in a 29-year-old man, Zeppi, with an unusual developmental history characterized by deprivation, absent or abusive family and other inappropriate social relationships. He is isolated, unemployed, suspicious and unkempt. He believes that there is a conspiracy in which others are trying to kill him by focusing electromagnetic waves on him. Following an incident in which a neighbour called the police because he was carrying a large knife, the police detained him and they found that he had two knives with him. Following admission to a psychiatric hospital, Zeppi did not take his psychotropic medication and during the third week of admission Zeppi experienced unusual physical sensations and attacked a nurse and broke her nose.

Psychiatrists commonly formulate cases and often do so using a medical-diagnostic model; this is especially true in the area of schizophrenia, which is often seen as largely biological illness. Casey provides a prototypical psychiatric formulation of this case. He presents classical rationales for the medical-diagnostic model. Namely, there are discrete illnesses described by symptom patterns codified in the APA's (1994) *Diagnostic and Statistical Manual* (DSM) and presented in multi-axial classification. These symptom patterns reflect underlying brain pathology and disturbances in neurotransmitters. The existence of these illnesses is supported by a vast amount of biomedical research and the effectiveness of psychotropic medications. Psychiatrists are skilled at detecting these symptom patterns and prescribe medications that

correspond to the diagnosed illness. Casey presents several common criticisms of this approach and finds them all unsatisfactory. He presents a formulation that is the DSM multi-axial classification of the illnesses. This guides treatment in identifying anti-psychotic medication as the treatment plan. Additionally, a multi-disciplinary team would provide other interventions, such as re-establishing family contact.

Behavioural approaches are often pitted as the opposite to medical models, since they construe behaviour as the thing in and of itself to be treated, rather than a symptom of an underlying illness (Sturmey, 2007, 2008). Hence, contrasting a behavioural formulation of this case highlights the characteristics of each approach. Wilder describes how a behavioural approach to the case would identify specific behaviours of interest and their relationship to environmental events such as antecedents and consequences as well as any skills deficits that Zeppi might have. Wilder notes that early behavioural models used arbitrary consequences, such as food, which were unrelated to the variables maintaining the behaviour. In contrast, contemporary behavioural interventions for schizophrenia are based on an understanding of which variables influence the target behaviour. Thus, treatment involves restructuring the environment based on this assessment. Other variables, such as history and genetics, may well be important, but the clinician cannot manipulate them. Wilder suggests that assessment includes ruling out medical problems, accurately identifying the function of the somatic complaints by individual experiments and identifying skills deficits. Wilder also demonstrates how the event can be analyzed using an antecedent-behaviour-consequent chart. The treatment plan would include teaching a skill to replace the somatic complaints that served the same function, teaching and motivating social, self-care and vocational skills.

Bentall, well known for his anti-psychiatry analysis of schizophrenia (Bentall, 2003), comments on the case and these formulations from a cognitive perspective. Bentall noted the limitations of psychiatric diagnosis of psychotic disorders, especially in terms of validity and the ability of psychiatric diagnosis to predict treatment. Likewise, he notes the limitations of this behavioural formulation because of the possibility of limited scope of the analysis and the possibility that treatment effects of operant interventions may be limited. He also notes that both formulations fail to address the content of the delusions. He suggests that two kinds of delusions are 'poor me' delusions, in which the person feels like an innocent victim, as in Zeppi's case, and 'bad me' delusions, in which a person feels that persecution is deserved. He goes on to reformulate the case, including both the presenting delusions, history and event, and goes on to suggest alternate cognitive interventions, such as testing the veracity of strange, but potentially true, beliefs.

*Anorexia nervosa*

Eating disorders are a common referral, and, like depression, clinicians should be able to formulate these common problems. Newton presents a case study that exemplifies many of the presenting problems and complexities of Anorexia Nervosa. These include reduced and restrictive eating, excessive exercise, various kinds of perfectionism and low weight that is not problematic for the client, but problematic for those around them. Additionally there are social problems, including complex family dynamics, poor friendships and avoidance of adult roles. Newton captures some of the common dynamics of anorexia, when at the second appointment, Antoinette's mother – a former ballerina who gave up her career to help her former husband's career – announces that she too has had anorexia since adolescence! and seeks the therapist's help for her problems.

Weerasekera (1996) has published on one particular form of eclectic case formulation called 'multi-perspective' case formulation. This is a version of the application of the biopsychosocial model of mental health applied to case formulation and involves consideration of biological, psychological and social factors and consideration of the individual and the system in which they behave. These different perspectives are integrated into one integrated formulation. Weerasekera argues that no one theoretical perspective is adequate to account for the full complexity of any case and thus all relevant theoretical perspectives should be used.

Weerasekera's formulation notes that Antoinette has biological vulnerabilities to Anorexia Nervosa, Obsessive Compulsive Personality Disorder and parent-child problems. Her developmental history and family dynamics may have contributed to the development of her problems although her performance at school, at least until recently, was a strength. Precipitating factors include attention from her mother for eating problems and avoidance of her father with his new wife. Her defences include displacing her feelings of loss onto activities she can control, such as exercise. Initial treatment includes establishing a positive therapeutic relationship and behavioural intervention to establish clear goals for change and cognitive therapy. This will then set the stage for an integrated treatment plan which will include cognitive-behavioural and psychodynamic therapy to address eating, facilitation of expression of affect, family therapy, medication to maintain weight gain and social activities at school.

Haynes has also developed a very characteristic approach to case formulation (Haynes and O'Brien, 2000). This approach involves multi-modal behavioural assessment, clear specification of which variables are causes, correlates and target behaviours. This method then classifies these causal

variables in terms of degree of manipulability, magnitude of effect and whether their effects are direct or intermediate. The formulation is then summarized in a Functional Analytic Clinical Case Model (FACCM) vector diagram. Lappailanen, Timonen and Haynes presented a second formulation of this case. Noting that diagnostic-based explanations of clinical problems are often circular, they go on to note that clinicians often fail to acquire the necessary, reliable and valid information to make a rigorously valid formulation. Thus, they recommend expanding the limited assessment information in the case to include many different forms of assessment, such as direct observation of mother–daughter interaction in analogue situations, such as eating a meal, self-monitoring many aspects of eating behaviour and so on. This information is used to systematically identify the status of relevant variables and potential causal chains of events and behaviour. They then use the resulting FACCM diagram to identify key causal variables that are readily manipulable and have a large effect on the target behaviours. For example, one of their FACCM formulations suggests that cognitive distortions, low calorie intake, control behaviours are the variables that are most modifiable and would result in the largest impact on excessive weight loss.

Cooper, an author with extensive experience in the area of eating disorders, provides a measured and careful analysis of the similarities and differences between these two approaches. For example, Weerasekera's formulation is eclectic, embraces diagnosis, global and specifies treatment in rather general terms, whereas Lappailanen *et al.*'s formulation is based on learning theory, explicitly rejects diagnosis, highly detailed and molecular and specific in treatment strategies. At the same time, she carefully eschews judgement about the relative merits of either formulation.

### *Hoarding in an older adult*

All the other cases presented in this volume are commonly encountered clinical problems. But, clinicians must formulate unusual problems too. DeVries case study of hoarding objects in an older adult is an uncommon problem, so it presented its formulators with the challenge of adapting their clinical skills and pre-existing frameworks to a novel or at least rare problem.

DeVries describes Mrs Lewis, a 76-year-old woman who is about to be ejected from her apartment. She has thrown almost nothing out of her apartment for many years. Every surface, other than one chair in which she sleeps, is covered with piles of newspapers, bills and books. She is meek, timid and strives not to offend. She is socially active in that she attends activities as a volunteer, but observes others rather than interacting with them. She has no friends in the residence where she lives, even though she has lived there for

10 years, and has little contact with her two daughters. She has a long history of broken relationships dating back to childhood and after her divorce she has had little money. She has tried to throw things away as part of a simple contingency contract with her psychologist, but was unable to do so. When her daughter visited recently, her daughter took things to storage, but Mrs Lewis was convinced that she threw many valuable things away, but did not know what they might be. When her psychologist begins to ask about important things that she has lost in her past, Mrs Lewis began talking about losses of family members throughout her life and agreed to discuss this further.

The formulation of this case contracts eclectic and pure forms of psychodynamic formulation. Cognitive analytic therapy (CAT) is a popular form of eclectic therapy that combines elements of cognitive, analytic and other therapies. Dunn notes that CAT is based on the idea that ideas of the self and consciousness consist of dialogues between the self and others and society and between the self and the self. CAT formulation too is a dialogue between the therapist and the client. This takes time. Therapy does not begin until a good working alliance has developed and quick simple solutions are avoided. Formulations consist, in part, of a number of typologies which are then fine-tuned to the individual person. The formulation is summarized in a letter to the client and sometimes in a diagram called a Sequential Diagrammatic Reformulation. In this case, the formulation typology is called 'Cinderella' in which it is characterized as 'submissive[,] serving[,] striving to please[,] avoiding conflict[,] needs not met[ and] self sufficient'. Dunn's letter summarizes the client's life history of losses and how it may be linked to her present problems. It states that part of her problem is that she cannot tell what things are valuable and so throws nothing away, but now the building supervisor is trying to throw her away. The CAT treatment plan is relatively standardized, at least in terms of the approximate sequence of events over a standard 16-week course of CAT.

A more classic and pure psychodynamic formulation of this case comes from Barrett who uses Luborsky's core conflictual relationship theme (CCRT) paradigm to formulate the case. The central idea in CCRT is that patterns of relationships recapitulate themselves across the lifespan. These patterns consist of client wishes, responses of others and the client's responses. Current interpersonal problems can be understood in those terms. Luborsky and colleagues developed supportive-expressive psychotherapy to use with CCRT formulations. Barrett concludes that Mrs Lewis is suffering from a Schizoid Personality Disorder, underlying depression and Obsessive Compulsive Disorder. Her history discloses consistent patterns of interaction. Treatment consists of supportive-expressive psychotherapy which reveals the formulation to the client gradually and in which she would learn better ways to defend

against unacceptable emotions, express her own needs and respond to others in a way that does not result in feelings of depression and anxiety.

Howells and Jones comment on these two psychodynamically influenced formulations primarily from a cognitive-behavioural perspective, although both authors state that they are influenced by other schools of psychology, such as CAT and personal construct theory. They apply Kuyken's and colleagues criteria for the adequacy of case formulation to these formulations (Bieling and Kuyken, 2003; Kuyken, 2006; Kuyken *et al.*, 2005). They note that the two formulations each generate a number of hypotheses and argue that there is overlap between some hypotheses from different formulations, such as concurrent on the role of problems to avoid distress associated with loss, but not for other hypotheses that seem to be quite different between formulations. They also note the possibility that both formulations do not emphasize evidence and may not actively test and attempt to disconfirm their hypotheses.

#### *Intellectual disabilities and anger*

Anger (or is it mere aggression?) is one of the most common threats to effective community adaptation and personal well-being in people with intellectual disabilities. Benson describes a 30-year-old, single man with mild intellectual disabilities and cerebral palsy living with his grandmother who is sociable, relaxed and friendly upon first meeting. His most prominent difficulty is interpersonal difficulties at work, but also at home with his grandmother. These include difficulties resolving minor interpersonal challenges, such as another client knocking over his soda or following instructions from his job coach, and other problems, such as difficulties understanding work schedules. He has a variety of work skills and he has not lost jobs because of not performing the basic elements of the job. These problems have resulted in him losing his job on several occasions over the last few years. He agrees that he sometimes has problems controlling his temper. His personal goal is to obtain a better job.

In the past, behavioural approaches dominated case conceptualization and treatment with people with intellectual disabilities and it continues to be the most active area of assessment and treatment research (Didden, Duker and Korzilius, 1997; Didden *et al.*, 2006). However, British practitioners have now adopted a variety of approaches which remain a point of controversy (Sturmey, 2005, 2006a, 2006b, 2006c), and this case study provides several interesting opportunities to contrast these approaches directly. Beail and Jackson write a psychodynamic formulation and Willner writes a cognitive-behavioural formulation. These formulations allow the reader to examine the application



of psychodynamic and cognitive-behavioural formulations to a problem that is not typically included in books on cognitive-behavioural and psychodynamic formulation. Didden's commentary gives a behavioural perspective on these approaches to case formulation.

Beail and Jackson note that psychodynamic case formulation is based on the model that current problems reflect hidden historical sources of anxiety that the client may be largely unaware of. The job of the therapist is to uncover these hidden feelings through transference and link the past with the present in therapy. This is done through individual weekly sessions with a therapist in a private setting away from work. The patient talks and freely associates and the therapist's job is to be a blank screen who does not give advice and who does not reveal personal information. The therapist also observes his or her own reaction to the client (counter-transference) and also uses this information in his or her formulation. Beail and Jackson speculate that this man had not integrated all the parts of his psyche. His problem may result from the absence of a father figure in his development which resulted in an absence of boundaries for his behaviour and in a rejection of the pain associated with disability. This is shown by defences, such as denial of his disability and the pain associated with this loss, and omnipotence, in which he presents himself as a physically fit and competent person without problems. Intervention would consist of weekly sessions of psychodynamic psychotherapy which will reveal and link the hidden past to the current feelings and problems and in this way result in integration of all parts of the person's psyche.

Willner's cognitive-behavioural formulation of this case uses both behavioural concepts, such as antecedents, behaviours and consequences, elements from cognitive therapy, such as dysfunctional cognitions causing problems with anger, and the 4P (predisposing, precipitating, perpetuating and protective) factors that Weerasekera used in an earlier formulation of eating disorder. Willner suggests that predisposing factors include intellectual disability, autism and attention hyperactivity disorder, precipitating factors include triggers, such as interpersonal slights, perpetuating factors, such as anger being effective at obtaining items from shopkeepers, and protective factors, such as his grandmother. Willner presents both a complex diagrammatic formulation and a simple linear graphical formulation of the case and argues for the superiority of the former. He suggests that treatment should include a standard anger management package modified for people with intellectual disability (Taylor and Novacco, 2005) with various individual elements, such as teaching relevant skills, such as stopping and thinking, assertiveness and hobbies.

Didden's commentary notes that these two formulations share some similarities, such as using self-reports of feelings, and both note that he has

problems with relationships and presents himself in a manner that minimizes his disabilities. Didden comments that there are many differences between these two approaches to case formulation, such as whether the analysis and treatment should focus on the present or past, whether presenting problems are things of interest in themselves or symbols or symptoms of underlying problems and the extent to which treatment is clearly described and manualized or not. Didden goes on to comment that both approaches to formulate this case suffer from circular arguments, by inferring underlying but unobservable causes, such as cognitive structures or hidden trauma that are inferred from behaviour and then used to explain behaviour. Finally, Didden goes on to suggest how a functional approach to this case might be used to develop an alternate case formulation.

Eells final chapter, *Contemporary Themes in Case Formulation*, comments and reacts to the earlier chapters in the book. He identifies five emerging themes: the limited quantity of research on the reliability and validity of case formulation research; the commonalities and differences between approaches to formulations in terms of what is formulated; the roles of evidence and theory in different approaches to case formulation; how different approaches to case formulation differ in the way information is organized; and the different explanatory mechanisms that are used in the various approaches to case formulation. In his final section, he outlines future directions in research including work on the psychometric properties of formulations, the roles of evidence-based practice, psychotherapy integration, clinical judgement and cross-cultural issues in case formulation. His chapter identifies links and themes that cross the various chapters of this volume, sometimes in surprising ways.

## STRENGTHS AND LIMITATIONS OF THIS PROJECT

### Strengths

All the authors made competent formulation which clinicians can use as models for their own work. The formulations are highly characteristic of the theoretical approaches that the authors adopted. They are good exemplars of different approaches to case formulation. The presence of more than one formulation from the same theoretical approach enables the reader to compare how one theoretical approach deals with different populations and problems. For example, the reader may compare psychodynamic formulations of anger in a person with intellectual disabilities, and psychodynamic approaches to hoarding in an older adult, cognitive-behavioural approaches to formulating depression and to anger in a person with intellectual

disabilities, and behavioural approaches to formulating depression and psychosis. The contrasting pairs of formulations also allow the reader to directly compare cognitive-behavioural and behavioural approaches, psychiatric and behavioural approaches, psychodynamic and cognitive-behavioural approaches, and psychodynamic and eclectic approaches to case formulation. The commentary chapters offer detailed critiques – both positive and some less so – of the preceding formulations. Some commentaries offer yet another case formulation. Others avoid offering specific critiques, but comment generally on the issues related to case formulation.

### **Limitations**

The format of this book is in some ways quite limited. The formulators only responded to a written case description. None of the formulators ever met these clients or experienced the clinical context in which the cases were presented. They did not get to observe the client's behaviour, hear their pattern of speech, or experience their own reactions or observe them with family members or staff. Although a couple of the authors asked for additional information from the case study authors, almost all did not request additional information. The strain of this method shows in some formulations, for example, when some authors commented upon missing information or indicated what they might do, depending upon the results of assessment information they did not have.

Yet, they all made formulations! Perhaps they may have made different formulations or proposed different treatment plans if they had met the clients or used different assessment methods. Even so, the formulations they made and the treatment plans they proposed look like prototypical and credible clinical work.

### **SUMMARY**

Clinicians face the daunting task of predicting the most effective treatment for each of their clients. In many situations diagnosis fails to do that. Many authors agree that case formulation must be brief, abstract, integrated and guide treatment. However, there are many approaches to this task that differ from one another in which variables are relevant to making a formulation. This volume illustrates these different approaches to case formulation by presenting two contrasting formations of a case, commentaries upon these formulations and a final chapter that identifies emerging issues and comments up the entire endeavour.

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