

RUNNING HEAD: Case Formulation-driven Psychotherapy

Persons, J. B. (2006). Case formulation-driven psychotherapy. *Clinical Psychology: Science and Practice*, 13, 167-170.

Case Formulation-driven Psychotherapy

Jacqueline B. Persons

San Francisco Bay Area Center for Cognitive Therapy

and University of California, Berkeley

Corresponding author: Jacqueline B. Persons, San Francisco Bay Area Center  
for Cognitive Therapy, 5435 College Avenue, Oakland, CA 94618. Tel: (510)  
652-4455. Fax: (510) 652-3872. E-mail: [jbp@sfbacct.com](mailto:jbp@sfbacct.com)

### Abstract

A case formulation-driven approach to psychotherapy addresses many of the difficulties clinicians experience when using empirically-supported treatment (EST) protocols to treat complex cases. A formulation-driven approach provides the flexibility required to work effectively with complex cases by allowing clinicians to make intervention decisions guided by theory and by the results of continuous assessment rather than simply by the list of interventions described in the EST protocol. To strengthen the empirical foundation of case formulation-driven psychotherapy, the therapist can use a hypothesis-testing approach to each case, rely on evidence-based nomothetic formulations and therapies as templates for the idiographic formulation and treatment plan, and rely on other empirical findings to guide formulation, intervention, and clinical-decision-making. Recently-developed EST protocols for complex cases include some of the key elements of case formulation-driven psychotherapy.

## Case Formulation-driven Psychotherapy

(Ruscio & Holohan, in press) do an outstanding job of laying out the issues involved in providing evidence-based care to complex cases. A case formulation-driven approach to psychotherapy, which I describe briefly here (see also (Persons, 2005) (Persons & Tompkins, in press), addresses many of these issues. Case formulation-driven psychotherapy calls for the therapist to develop an individualized formulation of each case that serves as a guide to treatment planning and intervention and to use a hypothesis-testing empirical approach to each case.

So, for example, Peter sought treatment for depressive symptoms that arose after he retired from a job he had held for more than 30 years. He had also recently begun drinking a 6-pack of beer on most evenings, and did not see this as a problem. His therapist conceptualized Peter's depressive symptoms as resulting from a significant loss of positive reinforcement (P. M. Lewinsohn & Gotlib, 1995), and conceptualized his alcohol use as a maladaptive strategy Peter used in an effort to get relief from his depressed mood that, because it interfered with his sleep, probably exacerbated Peter's low mood. This formulation led Peter's therapist to develop a treatment plan that strove to help Peter increase his participation in social and other pleasant events and recognize the costs of his alcohol intake and take action to reduce it. To accomplish those intermediate outcomes (Mash & Hunsley, 1993), the therapist selected interventions from several sources, using Socratic dialogue (Padesky, 1996) to

teach the behavioral conceptualization of his depressive symptoms, pleasure-predicting (Burns, 1999) to test Peter's belief that he would not enjoy social activities, behavioral activity scheduling (Beck, Rush, Shaw, & Emery, 1979; Bennett-Levy et al., 2004) and pleasant event scheduling (P.M. Lewinsohn, Munoz, Youngren, & Zeiss, 1986) to help Peter plan and carry out enjoyable activities, and motivational interviewing (Miller & Rollnick, 2002), self-monitoring, and behavioral experiments (Bennett-Levy et al., 2004) to help him collect information about his alcohol use and make a thoughtful decision about managing it. In addition, the therapist invited Peter's wife to attend some of the sessions so that she could take an active and helpful role in her husband's treatment. The therapist selected these interventions from multiple sources, including several EST protocols and a self-help book (Burns, 1999) that has been shown to provide effective treatment of mild to moderate depression in clinical samples. The case formulation guided the therapy in several ways, including by identifying the treatment targets (including the automatic thoughts, behaviors, and schemas underpinning Peter's symptoms) and the intermediate outcomes of the therapy.

One of the strengths of a case formulation-driven approach to treatment is its flexibility, as this case illustrates. Other strengths of the method are that its idiographic stance is appealing to clinicians, and it can be used by therapists of all modalities (Eells, 1997). A weakness of the method is the ease with which it can slide down a slippery slope and become non-evidence-based, in part *because of* its very flexibility.

The clinician can use three strategies to strengthen the empirical foundation of a case formulation-driven approach to treatment. They are: rely on a hypothesis-testing approach to the treatment of each case, rely on evidence-based nomothetic templates for the idiographic formulation and treatment plan, and rely on other types of empirical evidence to guide formulation, intervention, and clinical decision-making generally.

#### A hypothesis-testing empirical approach to each case

In a hypothesis-testing empirical approach to clinical work, the therapist uses information obtained during assessment to develop a formulation, which is a hypothesis about the causes of the patient's problems, and which (together with other information) is used as the basis for intervention. The therapist then doubles back (repeatedly) to the assessment phase, collecting data to monitor the process and progress of the therapy and using those data to revise the formulation and intervention as needed. Thus, Peter completed a Beck Depression Inventory before each session, and the therapist plotted Peter's score at each session and reviewed the plot with Peter at the beginning of the session. Peter also kept a daily log of mood, social contacts, and other pleasant events, and he and his therapist used those data to test the hypotheses that Peter's daily mood was related to the number of pleasant events in his calendar that day, and that an increase in social contacts and pleasant events would lead to a decrease in Peter's depressive symptoms.

#### Reliance on evidence-based nomothetic templates for the idiographic formulation and treatment plan

Although she did not use any single EST manual from beginning to end, Peter's therapist based her idiographic formulation and treatment plan for Peter on the nomothetic templates of Lewinsohn's (P. M. Lewinsohn & Gotlib, 1995) behavioral theory of and therapy for depression, the similar model underpinning behavioral activation (Martell, Addis, & Jacobson, 2001), on Beck's (Beck et al., 1979) cognitive model and therapy for depression, and on Motivational Interviewing (Miller & Rollnick, 2002). All of these models are empirically-supported to various degrees. Several types of data are relevant to the clinician, including evidence supporting the theory of psychopathology, evidence of the efficacy and effectiveness of the therapy based on the theory, and evidence supporting the proposed mechanisms of action of the EST.

Sometimes, as in the case of depression, there is more than one evidence-based nomothetic template to choose from (e.g., views of depression as due to negative cognitions (Beck et al., 1979), as due to loss of positive reinforcers (P. M. Lewinsohn & Gotlib, 1995), and as due to problem-solving deficits (D'Zurilla, 1986), among others). When this happens, the therapist can select the nomothetic formulation that best matches her idiographic formulation of the case at hand (Haynes, Kaholokula, & Nelson, 1999) or even blend elements of more than one model to suit the case at hand (Becker & Zayfert, 2001), as Peter's therapist did. Sometimes no evidence-based nomothetic template is available. In this situation, the therapist can use the strategy adopted by Opdyke and Rothbaum (1998), who used the empirically-supported formulations and interventions for one impulse-control disorder (trichotillomania)

as the template for a formulation and intervention plan for other impulse-control disorders for which no empirically-supported protocol is available (kleptomania and pyromania). Another option when there is no nomothetic template to work from is to rely on empirically-supported theories of psychopathology, especially those that underpin many of the currently-available ESTs. An elegant example is the use of operant conditioning theory as a foundation for a formulation and treatment for a child with migraine headache (O'Brien & Haynes, 1995).

#### Reliance on other types of data

The scientist-practitioner also relies on other types of data to guide clinical decision-making, including nomothetic findings like the work by (Ilardi & Craighead, 1994) showing that most patients who respond to cognitive therapy for depression show large benefits after only three to four sessions of treatment and the recent finding by (Karno & Longabaugh, 2005) that less directiveness by therapists improves drinking outcomes of reactant clients in alcohol treatment.

To summarize, a case formulation-driven approach to treatment entails the use of an idiographic case formulation to guide treatment planning and intervention decisions. To strengthen the evidence base of case formulation-driven cognitive-behavior therapy, the therapist also relies on an empirical hypothesis-testing approach to each case, uses evidence-based nomothetic formulations and treatment plans as templates for the idiographic formulation and treatment plan, and attends to other relevant data to guide formulation, intervention, and clinical decision-making.



A hallmark of the formulation-driven approach to treatment is a tighter linking of assessment and intervention than is frequently seen in the EST protocols (Persons, 1991). In Seligman's (Seligman, 1995) apt term, therapy is "self-correcting." Another key feature of a formulation-driven approach is the therapist's reliance on principles rather than on a list of interventions that must be carried out in order to guide intervention. A close look at some of the newest ESTs shows that they incorporate both these elements of case formulation-driven treatment. Evidence-based protocols of this sort include the protocols for Multisystemic Therapy (MST; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998), Dialectical Behavior Therapy (DBT; Linehan, 1993), and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999). It is likely not an accident that, at least in the case of DBT and MST, these therapies were developed for the treatment of complex cases. As (Haynes & O'Brien, 2000) pointed out, it is likely that a principle-driven, formulation-driven approach to treatment is most likely to be useful and cost-effective in the treatment of complex cases--although this is, of course, an empirical question.

## References

- Beck, A. T., Rush, J. A., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy for depression*. New York, NY: Guilford Press.
- Becker, C. B., & Zayfert, C. (2001). Integrating DBT-based techniques and concepts to facilitate exposure treatment for PTSD. *Cognitive and Behavioral Practice*, 8, 107-122.
- Bennett-Levy, J., Butler, G., Fennell, M., Hackmann, A., Mueller, M., & Westbrook, D. (Eds.). (2004). *Oxford guide to behavioural experiments in cognitive therapy*. Oxford: Oxford University Press.
- Burns, D. D. (1999). *Feeling good: The new mood therapy*. New York, NY: William Morrow and Company.
- D'Zurilla, T. J. (1986). *Problem-solving therapy: A social competence approach to clinical intervention*. New York, NY: Springer.
- Eells, T. T. (Ed.). (1997). *Handbook of psychotherapy case formulation*. New York, NY: Guilford Press.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. New York: Guilford.
- Haynes, S. N., Kaholokula, J. K., & Nelson, K. (1999). The idiographic application of nomothetic, empirically based treatments. *Clinical Psychology: Science and Practice*, 6, 456-461.
- Haynes, S. N., & O'Brien, W. H. (2000). *Principles and practice of behavioral assessment*. New York: Kluwer Academic/Plenum Publishers.

- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. New York: Guilford.
- Ilardi, S. S., & Craighead, W. E. (1994). The role of nonspecific factors in cognitive-behavior therapy for depression. *Clinical Psychology Science and Practice*, 1, 138-156.
- Karno, M. P., & Longabaugh, R. (2005). Less directiveness by therapists improves drinking outcomes of reactant clients in alcoholism treatment. *Journal of Consulting and Clinical Psychology*, 73(2), 262-267.
- Lewinsohn, P. M., & Gotlib, I. H. (1995). Behavioral theory and treatment of depression. In E. E. Beckham & W. R. Leber (Eds.), *Handbook of depression* (2nd ed., pp. 352-375). New York: Guilford.
- Lewinsohn, P. M., Munoz, R. F., Youngren, M. A., & Zeiss, A. M. (1986). *Control your depression*. New York: Simon and Schuster.
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York, NY: Guilford Press.
- Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in context: Strategies for guided action*. New York: W.W. Norton.
- Mash, E. J., & Hunsley, J. (1993). Assessment considerations in the identification of failing psychotherapies: Bringing the negatives out of the darkroom. *Psychological Assessment*, 5, 292-301.
- Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change* (Second ed.). New York: Guilford.

- O'Brien, W. H., & Haynes, S. N. (1995). A functional analytic approach to the conceptualization, assessment, and treatment of a child with frequent migraine headaches. *Journal of Clinical Psychology, 1*, 65-80.
- Opdyke, D., & Rothbaum, B. O. (1998). Cognitive-behavioral treatment of impulse control disorders. In V. E. Caballo (Ed.), *International handbook of cognitive and behavioural treatments for psychological disorders* (pp. 417-439). Oxford: Pergamon/Elsevier Science Ltd.
- Padesky, C. A. (1996). Guided discovery using Socratic dialogue. [videotape]. Oakland, CA: New Harbinger Press.
- Persons, J. B. (1991). Psychotherapy outcome studies do not accurately represent current models of psychotherapy: A proposed remedy. *American Psychologist, 46*, 99-106.
- Persons, J. B. (2005). Empiricism, mechanism, and the practice of cognitive-behavior therapy. *Behavior Therapy, 36*, 107-118.
- Persons, J. B., & Tompkins, M. A. (in press). Cognitive-behavioral case formulation. In T. D. Eells (Ed.), *Handbook of psychotherapy case formulation* (Second edition ed.). New York: Guilford.
- Ruscio, A. M., & Holohan, D. R. (in press). Applying empirically supported treatments to complex cases: Ethical, empirical, and practical considerations. *Clinical Psychology: Science and Practice*.
- Seligman, M. E. P. (1995). The effectiveness of psychotherapy: The Consumer Reports study. *American Psychologist, 50*, 965-974.

Author Note

I thank Michael A. Tompkins, my colleague at the San Francisco Bay Area Center for Cognitive Therapy, and participants in a recent discussion of evidence-based case formulation on the listserve of the Society for a Science of Clinical Psychology, especially Jonathan Abramowitz, John Hunsley, Howard Garb, and Drew Westen, for contributions to the ideas expressed here.