

# The Science of Cognitive Behavioral Therapy



Edited by  
**Stefan G. Hofmann**  
**Gordon J. G. Asmundson**



# THE SCIENCE OF COGNITIVE BEHAVIORAL THERAPY

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THE SCIENCE OF COGNITIVE  
BEHAVIORAL THERAPY

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# Preface

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In 2013, we published a target article entitled, *The Science of Cognitive Therapy* in the journal *Behavior Therapy* (Hofmann, Asmundson, & Beck, 2013) as a follow-up to a 2008 article published in *Clinical Psychology Review* (Hofmann & Asmundson, 2008). These articles have become two of the most downloaded and frequently cited articles in the clinical field. Soon after publication of the 2013 article, Elsevier approached us with the idea to turn it into a book. The book you are reading now is the result of this.

In this text, we focus on contemporary scientific models that fall under the general term, cognitive behavioral therapy (CBT). CBT is not a single treatment protocol. Instead, it refers to a family of interventions, as well as a scientific approach toward understanding and treating psychiatric disorders and human suffering. It includes a family of interventions that share the same basic elements of the CBT model that focus on the importance of cognitive and behavioral processes. This family has evolved from a specific treatment model into a scientific approach that incorporates a wide variety of disorder-specific interventions and treatment techniques as well as several unified or transdiagnostic protocols.

CBT is undoubtedly one of the big success stories of contemporary psychology and psychiatry. Soon after the generic CBT model was formulated by Aaron T. Beck and others (e.g., Beck, 1975) it revolutionized the field of clinical psychology and psychiatry. In recognition of his contribution, Beck received the Lasker Award in 2006, a highly prestigious medical prize. The chairman of the Lasker jury noted that “cognitive therapy is one of the most important advances—if not the most important advance—in the treatment of mental diseases in the last 50 years” (Altman, 2006).

Since then, an overwhelming number of effective CBT protocols have been developed for specific mental disorders. A review of the empirical literature identified 269 metaanalytic studies examining CBT for nearly every psychiatric problem (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012). A description of the various CBT protocols easily fills a 3-volume text book series (Hofmann, 2014).

Not surprisingly, many countries around the world have invested greatly in the training and dissemination of CBT, recognizing the enormous value of this family of effective short-term treatments. Economic data consistently show that the provision of CBT for common mental disorders is more cost-efficient than pharmacotherapy or other interventions, such as psychodynamic therapies. Unfortunately, the United States, Canada, and other developed countries are still lagging behind other nations, such as the United Kingdom and Australia, in necessary dissemination efforts of CBT. Therefore, wider dissemination of CBT should be a priority for future research. More recently, some authors have begun to develop unified CBT protocols that cut across diagnostic categories in

order to facilitate dissemination (e.g., Barlow et al., 2010). Books such as this will further facilitate recognition and dissemination of CBT worldwide.

This book is particularly relevant for graduate and advanced undergraduate students. It can be used as a supplement for classes in abnormal psychology, social psychology, and related courses. The text may also be applicable to clinical psychology and psychiatry residency programs and may be of great interest to researchers and CBT scholars. Written by some of the foremost experts and developers of these models and related interventions and treatment techniques, this text will fill a void in the literature by assembling seemingly diverse models, all of which belong to the same CBT family.

This book, which provides a cross-sectional view of some of the exciting new developments in the field of CBT, is organized into four broad sections. Section 1 covers scientific foundations and includes chapters on the generic model of CBT (Chapter 1: *The Generic Model of Cognitive Behavioral Therapy: A Case Conceptualization-Driven Approach* by Scott Waltman and Leslie Sokol), the basics of treatment-relevant assessments (Chapter 2: *Treatment-Relevant Assessment in Cognitive Behavioral Therapy* by Katerina Rnic and David Dozois), learning principles in CBT (Chapter 3: *Learning Principles in CBT* by Michelle Davis, Sara Witcraft, Scarlett O. Baird, and Jasper Smits), cognitive processes (Chapter 4: *Cognitive Processes in CBT* by Eni Becker and Janna Vrijssen), emotion regulation in CBT (Chapter 5: *Emotion Regulation in Cognitive Behavioral Therapy: Bridging the Gap Between Treatment Studies and Laboratory Experiments* by Andre Plate and Amelia Aldao).

Section 2 focuses on extensions, innovations, and modifications of CBT strategies, including adding pharmacotherapy to CBT (Chapter 6: *Combined Treatment With CBT and Psychopharmacology* by Josie Lee, Bridget Hearon, and Michael Otto), Acceptance and Commitment Therapy (Chapter 7: *Acceptance and Commitment Therapy and the Cognitive Behavioral Tradition: Assumptions, Model, Methods, and Outcomes* by Fredrich Chin and Steven Hayes), mindfulness-based treatments (Chapter 8: *Mindfulness-Based Cognitive Behavioral Treatments* by Lizabeth Roemer, Natalie Arbid, Jennifer Martinez, and Susan Orsillo), cultural adaptations (Chapter 9: *Global to Local: Adapting CBT for Cross-Cultural Expressions of Psychopathology* by Anushka Patel and Devon Hinton), adaptations for older adults (Chapter 10: *Cognitive Behavioral Therapy in Older Adults* by Elizabeth Price, Cynthia Kraus-Schuman, and Melinda Stanley), and adaptations for children and adolescents (Chapter 11: *Cognitive Behavioral Therapy for Children and Adolescents* by Danielle Cornacchio, Amanda Sanchez, Tommy Chou, and Jonathan Comer).

Section 3 covers problem-focused approaches, including behavioral activation for depression (Chapter 12: *Behavioral Activation Treatments for Depression* by Leanne Quigley and Keith Dobson), PTSD (Chapter 13: *Posttraumatic Stress Disorder* by Richard Bryant), eating disorders (Chapter 14: *Eating Disorders: Transdiagnostic Theory and Treatment* by Zafra Cooper and Ricardo Dalle Grave), anxiety disorders (Chapter 15: *Transdiagnostic Treatment for Anxiety Disorders* by Laren Conklin and Hannah Boettcher), sleep problems (Chapter 16: *Cognitive Behavioral Therapy for Sleep Disorders* by Caitlin Eggleston, Michael Dolsen, and Allison Harvey), somatoform disorders and pain (Chapter 17: *Cognitive Behavioral Therapy for Somatoform Disorders and*



Pain by Maria Kleinstäuber and Winfried Rief), and dialectic behavior therapy for borderline personality disorder, suicidality, and other emotion dysregulation disorders (Chapter 18: Dialectical Behavior Therapy: Overview, Characteristics, and Future Directions by Anita Lungu and Marsha Linehan).

The fourth and final section covers computer-assisted applications, including cognitive bias modification training (Chapter 19: Cognitive Bias Modification by Jennie Kuckertz and Nader Amir), cognitive remediation training (Chapter 20: Cognitive Training in Schizophrenia by Kristen Haut, Vijay Mittal, Stewart Shankman, and Christine Hooker), internet-based CBT (Chapter 21: Internet-Based Cognitive Behavior Therapy by Gerhard Andersson, Per Carlbring, and Heather Hadjistavropoulos), and virtual reality (Chapter 22: Virtual Reality and Other Realities by Cristina Botella, Rosa Baños, Azucena García-Palacios, and Soledad Quero).

The selection of these chapters illustrates that the particular CBT approach needs to be tailored to the particular presenting problems, the context, and the particular person. Therefore, in order to maximize the efficacy of treatment, the CBT therapist has to understand the patient's psychological problems within the CBT framework and then identify the appropriate therapeutic targets and select the most effective treatment strategies. This directly links the theory to the techniques. We hope that this book will assist clinicians to deliver these highly effective evidence-based treatments to reduce human suffering and enhance quality of life.

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