



Delivering CBT for Insomnia in Psychosis

A CLINICAL GUIDE

Flavie Waters,
Melissa J. Ree, and Vivian Chiu



Delivering CBT for Insomnia in Psychosis

A Clinical Guide

**Flavie Waters, Melissa J. Ree,
and Vivian Chiu**

First published 2017
by Routledge
711 Third Avenue, New York, NY 10017

and by Routledge
2 Park Square, Milton Park, Abingdon, Oxon, OX14 4RN

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2017 Flavie Waters, Melissa J. Ree, and Vivian Chiu

The right of Flavie Waters, Melissa J. Ree, and Vivian Chiu to be identified as authors of this work has been asserted by them in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. The purchase of this copyright material confers the right on the purchasing institution to photocopy pages which bear the photocopy icon and copyright line at the bottom of the page. No other parts of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

Library of Congress Cataloging in Publication Data

Names: Waters, Flavie, author. | Ree, Melissa J., author. | Chiu, Vivian, author.

Title: Delivering CBT for Insomnia in psychosis : a clinical guide / By Flavie Waters, Melissa J. Ree, and Vivian Chiu.

Description: New York, NY : Routledge, 2017. Includes bibliographical references and index.

Identifiers: LCCN 2016045646 | ISBN 9781138186514 (hbk : alk. paper) |

ISBN 9781138186521 (pbk : alk. paper) | ISBN 9781315643793 (ebk)

Subjects: | MESH: Sleep Initiation and Maintenance Disorders—therapy | Cognitive Therapy—methods | Psychotic Disorders—therapy

Classification: LCC RC548 NLM WM 188 DDC 616.8/49820651—dc23

LC record available at <https://lccn.loc.gov/2016045646>

ISBN: 978-1-138-18651-4 (hbk)

ISBN: 978-1-138-18652-1 (pbk)

ISBN: 978-1-315-64379-3 (ebk)

Typeset in Baskerville
by Florence Production Ltd, Stoodleigh, Devon, UK

Delivering CBT for Insomnia in Psychosis

Individuals with psychiatric disorders such as schizophrenia, bipolar disorder, and post-traumatic stress disorder often report Insomnia and difficulties sleeping, which can significantly impede recovery, worsen symptoms, and reduce quality of life. This volume presents a detailed theoretical rationale and session-by-session outline for delivering Cognitive Behaviour Therapy for Insomnia to people with these mental health disorders. The treatment has been developed in close collaboration with people living with mental illness, as well as sleep specialists and psychosis experts. Information regarding the efficacy of the programme is presented, along with resources offering information on complicating factors, avoiding relapse, managing stress, and restoring lifestyle balance.

Flavie Waters, PhD, is a leading expert in psychosis at the University of Western Australia and North Metro Health Service Mental Health, Western Australia.

Melissa J. Ree, PhD, is a clinical psychologist and CBT Insomnia expert at the Marian Centre and Sleep Matters, Western Australia.

Vivian Chiu, BPsych (Hons), is a research psychologist at the University of Western Australia and North Metro Health Service Mental Health, Western Australia.

Practical Clinical Guidebooks Series

Exposure Treatments for Anxiety Disorders

A Practitioner's Guide to Concepts, Methods, and Evidence-Based Practice
Rosqvist

Treating Sexual Offenders

An Integrated Approach
Marshall, Marshall, Serran, and Fernandez

Evidence-Based Treatments for Alcohol and Drug Abuse

A Practitioner's Guide to Theory, Methods, and Practice
Emmelkamp and Vede

Cognitive-Behavioral Treatment for Generalized Anxiety Disorder

From Science to Practice
Dugas and Robichaud

Cognitive Behavior Therapy for Smoking Cessation

A Practical Guidebook to the Most Effective Treatments
Perkins, Conklin, and Levine

Cognitive Behavioral Therapy for Adult ADHD

An Integrative Psychosocial and Medical Approach
Ramsay and Rostain

Cognitive Behavioral Therapy for Social Anxiety Disorder

Evidence-Based and Disorder-Specific Treatment Techniques
Hofmann and Otto

Compulsive Buying

Clinical Foundations and Treatment
Muller and Mitchell

Contextual Anger Regulation Therapy

A Mindfulness and Acceptance-Based Approach
Gardner and Moore

Specialized Cognitive Behavior Therapy for Obsessive Compulsive Disorder

An Expert Clinician Guidebook
Sookman

Delivering CBT for Insomnia in Psychosis

A Clinical Guide
Waters, Ree, and Chiu

Preface

There is such solid evidence with regards to the pivotal role that sleep plays in mental health. Poor sleep is not just an epiphenomenon of a psychiatric condition, but rather it is both a cause and a consequence of poorer mental health. It is clear that treatment of sleep problems in their own right ought to be the standard for everyone reporting mental health problems and sleep difficulties.

In the case of psychotic disorders, we know that, when sleep improves, psychiatric symptoms and daytime function also improve. Evidence is accumulating that even those with severe mental illness can benefit from psychological and behavioural approaches to poor sleep. Although the field of CBT for Insomnia (CBT-I) in the context of psychotic disorders is relatively new, it has reached a stage where dissemination of CBT-I treatment details may facilitate clinical outcomes and personal recovery. This book is intended to provide a concise description of both the treatment rationale and treatment delivery particulars. It also provides a CBT-I Therapist Manual and take-home client resources to address Insomnia and related sleep problems in people with chronic psychotic disorders whose levels of functioning and psychopathology are at the severe end of the continuum, and who have previously been considered too low functioning for traditional CBT-I treatment options.

We hope that this book may serve as a step towards better awareness regarding the effectiveness of CBT-I and greater opportunities for training in behavioural sleep medicine in the psychiatric sector so that the ideal of routine sleep treatment can become a reality.

Acknowledgements

We would like to express our deepest appreciation to all the participants who contributed to the development and evaluation of the CBT-I manual, and to the mental health staff from different mental health organisations across Perth who supported our efforts to make sleep intervention an integral part of patient care and treatment.

In addition, we would like to thank the following family members, friends, mentors, and colleagues who provided inspiration, knowledge, and support in the writing of this book:

Flavie Waters: I am forever thankful for my Mother, Diana Laurie, who tirelessly helped to support me and edit chapters; Keira James, who is always up for a challenge; Daniel Rock and Patrick Marwick, for supporting clinical research activities within mental health services; and Michael Waters, for always saying yes.

Melissa Ree: My past supervision from Professor Allison Harvey has heavily influenced my understanding and thinking about Insomnia and its treatment, and this certainly comes through in this book. Further, a heartfelt thank you to my husband and fellow clinical psychologist, Paul Jeffery, for his insightful reviews of chapters and manual sessions. Finally, to clinician friends and colleagues who edited chapters—thank you, Gayle Maloney and Hanedy Catalan.

Vivian Chiu: Aleksandar Janca for his support and kindness; Alan and Jessica Chiu for feeding me; my friends and partner for encouraging me and keeping me away from the TV.

Abbreviations

5HT	Serotonin
ACh	Acetylcholine
BzRA	Benzodiazepine receptor agonistic modulator
CBT	Cognitive Behaviour Therapy
CBT-I	Cognitive Behaviour Therapy for Insomnia
CBTp	Cognitive Behaviour Therapy for psychosis
CPAP	Continuous positive airway pressure
CT	Cognitive therapy
DASS	Depression Anxiety Stress Scales
DBAS	Dysfunctional Beliefs About Sleep scale
DBAS-16	Dysfunctional Beliefs and Attitudes about Sleep Scale—16-item version
DLMO	Dim light melatonin onset
<i>DSM-V</i>	<i>Diagnostic and Statistical Manual of Mental Disorders</i> (fifth edition)
EEG	Electroencephalogram
ESS	Epworth Sleepiness Scale
GABA	Gamma-aminobutyric acid
GOOBICS	Get out of bed if you can't sleep
HPA	Hypothalamic–pituitary–adrenal
<i>ICSD-3</i>	<i>International Classification of Sleep Disorders</i> (3rd edition)
ISI	Insomnia Severity Index
MAOI	Monoamine oxidase inhibitor
MEQ	Morningness–Eveningness Questionnaire
MINI	Mini International Neuropsychiatric Interview
MINI psychosis	Mini International Neuropsychiatric Interview Psychotic Disorders module
MSLT	Multiple Sleep Latency Test
N1	Stage 1 NREM sleep
N2	Stage 2 NREM sleep
N3	Stage 3 NREM sleep
N4	Stage 4 NREM sleep
NGO	Non-governmental organisation
NREM	Non-rapid eye movement
OCD	Obsessive–compulsive disorder
OSA	Obstructive sleep apnoea
PHQ-4	Patient Health Questionnaire for Anxiety and Depression
PLMD	Periodic limb movement disorder
PSG	Polysomnography

PSQI	Pittsburgh Sleep Quality Index
PTSD	Post-traumatic stress disorder
REM	Rapid eye movement
RLS	Restless legs syndrome
SAMI	Sleep Associated Monitoring Index
SHiK	Sleep Hygiene Knowledge Scale
SHiK-B	Sleep Hygiene Behaviours Scale
SNRI	Serotonin-norepinephrine-reuptake inhibitors
SSRI	Selective serotonin-reuptake inhibitors
TAU	Treatment as usual
TCQI-R	Thought Control Questionnaire for Insomnia-Revised
TNID	Turning nightmares into dreams
Z-drugs	Benzodiazepine receptor agonistic modulators

Contents

<i>Figures, Tables, and Text Boxes</i>	viii
<i>Preface</i>	xi
<i>Acknowledgements</i>	xii
<i>Abbreviations</i>	xiii
1 Introduction	1
PART I	
Conceptual Frameworks and Evidence Base	9
2 Psychotic Disorders: An Overview of Clinical Features and Treatment Approaches	11
3 Insomnia Disorder and Other Sleep Disturbances: An Overview	18
4 Characteristics of Insomnia and Other Sleep Disturbances in Psychotic Disorders	28
5 Sleep, its Regulation, and Barriers to Good Sleep	39
6 Understanding Insomnia and Other Sleep Disturbances in Psychotic Disorders	50
7 Description of Cognitive Behavioural Therapy for Insomnia	60
8 Assessing Sleep	82
9 Evidence for CBT-I in Psychotic Disorders	97
10 Clinical Cases	107
PART II	
Therapist Manual	131
11 Tips and Instructions to the Therapist	133
12 Therapist Manual Session 1: Learning about Sleep and Good Sleep Habits	140

13	Therapist Manual Session 2: Maximising Energy and Working with Unhelpful Beliefs about Sleep	155
14	Therapist Manual Session 3: Managing Worries and a Busy Mind and Introducing Relaxation	171
15	Therapist Manual Session 4: Maintaining Wellness and Working with Triggers for Poor Sleep	188
PART III		
Client Resource Packs		205
16	Client Resource Pack Session 1: Learning about Sleep and Good Sleep Habits	207
17	Client Resource Pack Session 2: Maximising Energy and Working with Unhelpful Beliefs about Sleep	219
18	Client Resource Pack Session 3: Managing Worries and a Busy Mind and Introducing Relaxation	232
19	Client Resource Pack Session 4: Maintaining Wellness and Working with Triggers for Poor Sleep	248
PART IV		
Appendices		263
	Appendix 1: Clinical Interview for Sleep	265
	Appendix 2: Sleep Diary	273
	Appendix 3: Sleep Hygiene Diary	274
	Appendix 4: Some Interesting Facts about Dreaming	275
	Appendix 5: Decision Balance Sheet	276
	Appendix 6: In-Session Feedback	277
	Appendix 7: Time in Bed Restriction Instructions	278
	Appendix 8: Snacks that Provide Energy throughout the Day	280
	Appendix 9: Challenging Unhelpful Beliefs about Sleep	281
	Appendix 10: My Personal Cycle of Insomnia	282
	Appendix 11: Linking Thoughts and Feelings Worksheet	284
	Appendix 12: Relaxing and Fun Activities	285
	Appendix 13: Additional Relaxation Exercises	286
	Appendix 14: Information about Sleeping Tablets	287

Appendix 15: Reducing Your Usage of Sleeping Tablets	288
Appendix 16: Evaluating My Progress	289
Appendix 17: Change Plan Worksheet ('My Goals')	290
<i>Index</i>	291

Figures, Tables, and Text Boxes

Figures

1.1	Impact of Sleep Problems in Psychotic Disorders	2
4.1	Sleep Latency in Psychotic Disorders	29
4.2	Total Sleep Duration in Psychotic Disorders	30
4.3	Negative Impact of Sleep Dysfunctions on Recovery in Psychiatric Disorders	34
5.1	Transition between Sleep Stages (Hypnogram)	40
5.2	Vicious Cycle of Physiological and Psychological Contributors to Insomnia	45
5.3	Contributions of Predisposing, Precipitating, and Perpetuating Factors in Acute and Chronic Stages of Insomnia	48
7.1	Conditioned Arousal in Insomnia	66
7.2	Example of the Vicious Cycle of Insomnia	70
8.1	Confidence Ruler	88
9.1	Self-reported Change in Measures of Sleep and Quality of Life across Sessions 2–4 (Higher Scores Indicate Improvement)	104
9.2	Percentage of Participants who Improved ‘More than Expected’ in Their Treatment Goals	104
10.1	Annie’s Strategies for Coping with Mental Health Symptoms	113
10.2	John’s Strategies for Coping with Mental Health Symptoms	124
11.1	Topics Addressed in the <i>Sleep Well, Feel Well with Psychosis</i> Programme	137
12.1	Topics Addressed this Week (Session 1)	144
13.1	Topics Addressed this week (Session 2)	159
13.2	Example of Pie Chart Activity	161
13.3	Challenging Unhelpful Beliefs about Sleep	165
14.1	Topics Addressed this Week (Session 3)	173
14.2	The Cycle of Clock Watching at Night	175
15.1	Topics Addressed this Week (Session 4)	192
15.2	Not All Stress Is Bad	199
15.3	Which Describes You Best?	199
15.4	The Pattern of Recovery	201

Tables

5.1	Sleep Stages: Brief Description and Time Spent in Each Stage	40
5.2	Recommendations for Sleep Duration for Adults	41

5.3	Unhelpful Cognitive Characteristics about Sleep that Lead to Arousal	44
5.4	Three Barriers to Restful Sleep	46
5.5	Predisposing, Precipitating, and Perpetuating Factors of Insomnia: Definition and Examples	47
6.1	Effects of Various Medications and Substances on Sleep	54
6.2	Cognitive Perpetuating Factors in Psychotic Disorders	56
7.1	Strengths of CBT-I as a Treatment Option for Insomnia	63
7.2	The Three Barriers to Sleep in Psychosis and Example Interventions	77
9.1	Means and Standard Deviations of the Outcome Variables for CBT-I and TAU Groups at Baseline and Post-treatment	102
10.1	Annie's Questionnaire Scores in Selected Domains Pre- and Post-CBT-I	108
10.2	Annie's Sleep Parameters over 7 Days	108
10.3	Reframing Negative and Unhelpful Thoughts with Annie	114
10.4	Annie's Individualised Summary Plan	116
10.5	Annie's Self-rated Achievement of CBT-I Treatment Goals	116
10.6	John's Sleep Parameters over 7 Days	119
10.7	John's Questionnaire Scores in Selected Domains Pre- and Post-CBT-I	119
10.8	John's Individualised Summary Plan	126
10.9	John's Self-rated Achievement of CBT-I Treatment Goals	127
11.1	Barriers to Treatment and Suggested Approach	136
13.1	Strategies for Unhelpful Beliefs about Sleep	166
14.1	Linking Thoughts and Feelings	179
14.2	Another Example of the Link between Thoughts and Feelings	179
14.3	The 3 Cs	181
14.4	Negative Thoughts Record Worksheet	182
15.1	Life Balance Plan	198

Text Boxes

2.1	Clinical Symptoms Commonly Associated with Psychosis	11
3.1	Diagnostic Classification Criteria for Insomnia Disorder	19
7.1	Common Sleep Hygiene Practices	65
7.2	Physical, Behavioural, and Psychological Factors that Contribute to Daytime Fatigue and Reduced Energy	69
7.3	Common Reasons for a 'Busy Mind'	72

1 Introduction

The term ‘psychosis’ refers to a constellation of clinical symptoms such as hallucinations, delusions, and disorganised thinking, alongside negative symptoms such as reduced motivation and social withdrawal. People living with psychotic symptoms often suffer from disorders such as schizophrenia, schizoaffective disorder, bipolar disorder, substance-induced psychosis, and even major depression or post-traumatic stress disorder (PTSD).

Approximately half of these individuals have other co-occurring difficulties such as cognitive impairments, social and occupational difficulties, and other physical health concerns, many of which persist between psychotic episodes. There is increasing evidence that almost all individuals with psychotic disorders also experience difficulties with their sleep. Approximately half meet the criteria for Insomnia Disorder (from hereon in, also referred to as Insomnia) and/or co-morbid sleep complaints such as hypersomnia, circadian rhythm disturbances, and nightmares.

These disorders of sleep are often distressing and can directly impact on clinical symptoms and the clinical course of an individual’s mental health disorder, as well as their physical health, cognition, and quality of life (see Figure 1.1). Consequently, so that the health and functional recovery of people with psychotic disorders can be optimised, there is a critical need to address and provide effective treatment options for their disturbed sleep. To this end, cognitive behavioural therapy for Insomnia (CBT-I) offers great promise, and this book outlines the theory, evidence, and a detailed description of CBT-I for use in the context of psychotic disorders.

The Psychological Treatment of Psychotic Disorders

There is now robust evidence that psychological treatments can assist in the recovery of individuals with psychotic disorders. Clinical practice guidelines recommend that psychological interventions, such as cognitive behavioural therapy (CBT), should be routinely offered alongside antipsychotic medications as a first-line treatment option (e.g. National Collaborating Centre for Mental Health, 2014).

The use of CBT, in particular, has a 20-year history of treating symptoms of psychotic disorders, with more than 50 randomised controlled trials. Typically, effect sizes are robust, with reports ranging between 0.3 and 0.5 (e.g. Beck and Rector, 2000; Wykes et al., 2008; Grant et al., 2012). Furthermore, CBT has been found to promote a recovery-oriented approach to mental health practice (Bellack, 2006) and is a treatment option that people with psychosis express a desire to engage in (e.g. Kilbride et al., 2013; Waters et al., 2015).

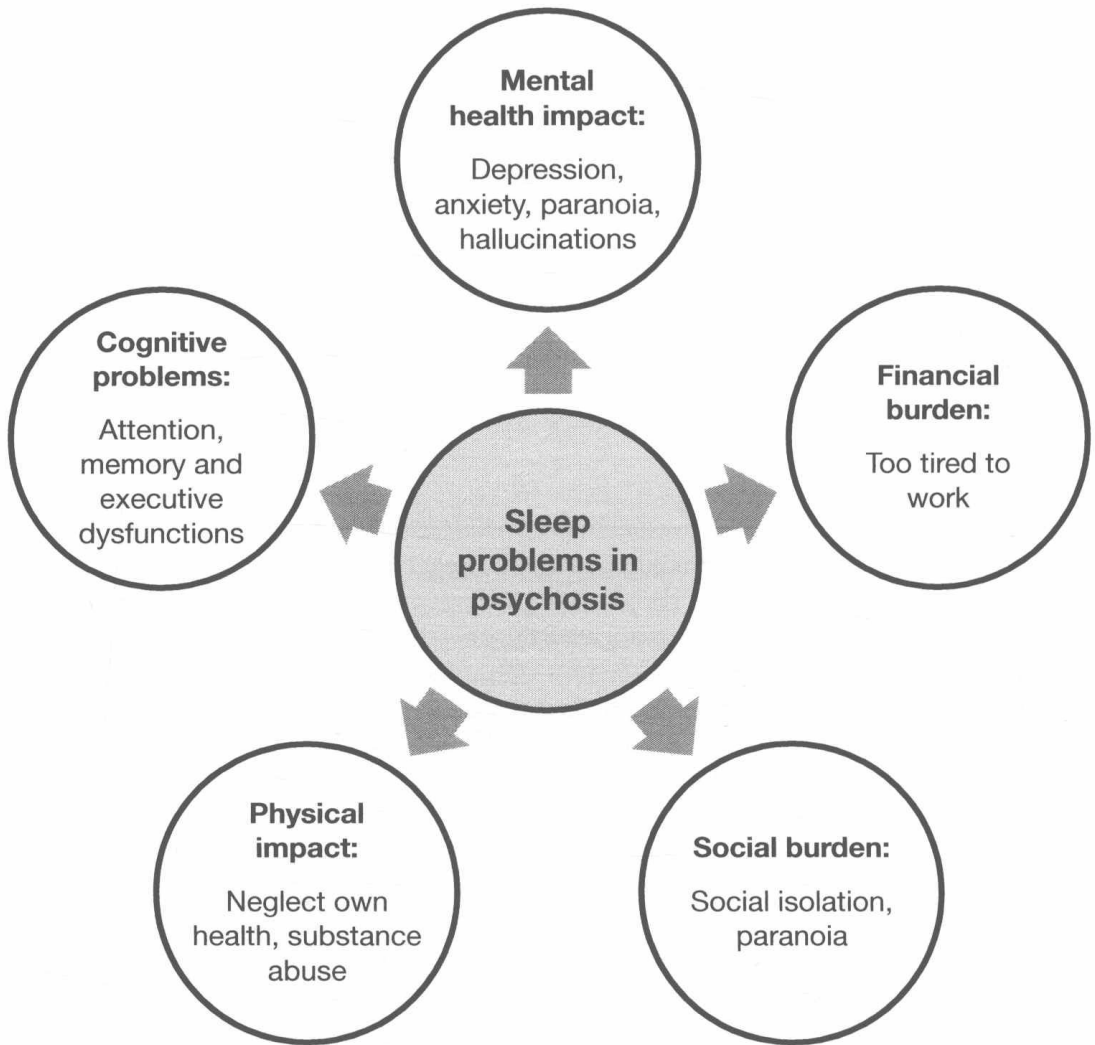


Figure 1.1 Impact of Sleep Problems in Psychotic Disorders

The Treatment of Insomnia and Other Sleep Disturbances Using CBT-I

There is extremely robust evidence for the effectiveness of CBT in addressing sleep disturbances in the general population (CBT-I). Findings show that CBT-I produces longer-lasting effects than pharmacological interventions alone and should be promoted as a first-line treatment option (Jacobs et al., 2004; Qaseem et al., 2016; Schutte-Rodin et al., 2008).

More recently, CBT-I alongside usual treatment (i.e. pharmacological) has emerged as an intervention that has the potential to provide long-term solutions for sleep problems in people with a psychotic disorder (e.g. Freeman et al., 2015; Harvey et al., 2015). Despite the benefits of evidence-based psychological interventions, however, people living with severe and persistent psychotic symptoms often have limited access to these treatment options. This is partly because standard CBT-I programmes need to be adapted to address the additional challenges and circumstances of people with psychotic disorders. When they are adapted appropriately, there is emerging evidence that such programmes can be highly effective for this population.

The aim of this book is to provide a CBT-I framework for clinicians working to address and treat the disorders of sleep in individuals with a psychotic illness. In particular, the manual provides strategies to address Insomnia and related sleep problems in people with chronic psychotic disorders whose levels of functioning and psychopathology are at the severe end of the continuum, and who have previously been considered too low-functioning for traditional CBT-I treatment options. We hope that this book presents a strong argument that clinically meaningful gains can be made with a CBT-I approach for individuals with psychosis.

The development of the manual

We have developed and evaluated a manualised, four-session CBT-I intervention that specifically addresses sleep complaints and related daytime sleepiness in low-functioning individuals with psychotic disorders. Client resource packs and additional materials are also provided to assist the therapeutic process and to encourage clients to self-manage their difficulties. The intervention manual can be administered in either a group or individual format.

The development of this manual and its resources arose from close collaboration with people living with psychotic disorders and Insomnia. Between 2011 and 2014, surveys and focus groups were conducted with representatives from this clinical group to elicit detailed information regarding their personal experience of sleep problems, antecedent factors, and the subsequent impact of these difficulties (Waters et al., 2011, 2012, 2013; Chiu et al., 2016). This preliminary research also identified the knowledge gaps and cognitive styles of these individuals (Chiu et al., 2015), as well as the symptoms they most wanted treated and their preferred method of treatment (Waters et al., 2015).

These findings, together with in-depth enquiries during the development and piloting of the intervention, have ensured that the manual and its resources meet the needs and particular treatment challenges of people with psychotic disorders. Our research indicated that adaptations to standard CBT-I were required so that the specific challenges faced by those with a psychotic disorder were addressed.

Adaptations to CBT-I in this population should ideally accommodate:

- hypersomnia, circadian (sleep–wake) rhythm disruptions, and nightmares because these commonly co-occur with Insomnia;
- the intrusive thoughts, hallucinations, and paranoia that contribute to difficulties in falling asleep and night-time arousal;
- the common use of nicotine, caffeine, alcohol, illicit drugs, and psychotropic medications that impact on sleep onset and quality;
- the lack of daytime structure (e.g. due to low mood, avoidance, unemployment, social isolation) that disrupts sleep routines and circadian rhythms;
- the presence of learning difficulties and other cognitive deficits in domains such as attention and concentration;
- negative symptoms (see Box 2.1), low mood and anxiety;
- low motivation and low self-efficacy.

It is extremely encouraging to see that independent international research appears to be converging on a similar set of adaptations to standard CBT-I for use in individuals with a psychotic disorder. In particular, the work of Freeman and colleagues, in the UK, and Harvey and colleagues, in the USA, have suggested consistent adaptations in their CBT-I protocols.