# **Cognitive treatment of illness perceptions**

A theory-driven approach to chronic low back pain rehabilitation

This study was supported by The Netherlands Organization for Health Research and Development (ZonMw) grant no. 014-32-041. The study presented in this thesis was performed at the Department of Rehabilitation Medicine and Psychology of the Reade Centre for Rehabilitation and Rheumatology (formerly Jan van Breemen Institute), Amsterdam, the Netherlands

The publication of this thesis was generously supported by: Reade Centre for Rehabilitation and Rheumatology , TNO Life Style and FitForm

ISBN: 978-90-5335-493-3

Cover and lay-out: Joke Vollebregt

Printed by: Ridderprint BV, Ridderkerk, the Netherlands

© 2112, P.C. Siemonsma, the Netherlands

#### VRIJE UNIVERSITEIT

### **Cognitive treatment of illness perceptions**

A theory-driven approach to chronic low back pain rehabilitation

### ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan de Vrije Universiteit Amsterdam, op gezag van de rector magnificus prof.dr. L.M. Bouter, in het openbaar te verdedigen ten overstaan van de promotiecommissie van de faculteit der Geneeskunde op xxxxdag maand 2011 om xx.xx uur in de aula van de universiteit, De Boelelaan 1105

door

Petra Cecilia Siemonsma

geboren te Leeuwarden

promotor: prof.dr. G.J. Lankhorst

copromotoren: dr. A.T. Lettinga

dr. L.D. Roorda

## **CONTENTS**

CHAPTER 1	Introduction	7	
CHAPTER 2	The benefits of theory for clinical practice: cognitive treatment for chronic low back pain patients as an illustrative example		
CHAPTER 3	Benefits of treatment theory in the design of explanatory trials: cognitive treatment of illness perceptions in chronic low back pain rehabilitation as an illustrative example	35	
CHAPTER 4	Graded activity, gradual exposure in vivo, and cognitive treatment of illness perceptions: a comparative analysis of three cognitive behavioral treatments for chronic low back pain	53	
CHAPTER 5	Cognitive treatment of illness perceptions in patients with chronic low back pain: results of a randomized controlled trial	79	
CHAPTER 6	Best candidates for cognitive treatment of illness perceptions in chronic low back pain: results of a theory-driven predictor study	101	
CHAPTER 7	Assessing fidelity to treatment protocol: evaluation of an intervention aimed at changing illness perceptions of patients with chronic low back pain	121	
CHAPTER 8	General discussion and epilogue	141	
SUMMARY		155	
SAMENVATTING		167	
ACKNOWLEDGEN	MENTS	179	
ABOUT THE AUTI	HOR	183	
PUBLICATIONS		185	