Financial support was kindly provided by: The EMGO Institute for Health and Care Research, VU University and SBOH, employer of GP trainees.

This thesis was prepared within the EMGO+ Institute for Health and Care Research and the Department of General Practice of the VU University Medical Center, Amsterdam, the Netherlands. The EMGO+ Institute participates in the Netherlands School of Primary Care Research (CaRe), which was re-acknowledged in 2005 by the Royal Netherlands Academy of Arts and Sciences (KNAW).

The infrastructure for the NESDA study (www.nesda.nl) is funded through the Geestkracht program of the Netherlands Organisation for Health Research and Development (Zon-MW, grant number 10-000-1002) and is supported by participating universities and mental health care organisations (VU University Medical Center, GGZ inGeest, Arkin, Leiden University Medical Center, GGZ Rivierduinen, University Medical Center Groningen, Lentis, GGZ Friesland, GGZ Drenthe, IQ Healthcare, Netherlands Institute for Health Services Research (NIVEL) and Netherlands Institute of Mental Health and Addiction (Trimbos)).

Marloes M.J.G. Gerrits
The interplay between depression, anxiety and physical health
Thesis, Vrije Universiteit, The Netherlands

Cover design: Eva Bolt
Printed by: Ipskamp Drukkers, Enschede, The Netherlands

© Marloes M.J.G. Gerrits, 2013
All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronically, mechanically, by photocopying, recording, or otherwise, without prior permission of the author.
promotoren: prof.dr. H.E. van der Horst
prof.dr. B.W.J.H. Penninx
copromotoren: dr. H.W.J. van Marwijk
dr. P.C. van Oppen

CONTENTS

Chapter 1 General introduction 7
Chapter 2 The role of somatic health problems in the recognition of depressive and anxiety disorders by general practitioners 23
Chapter 3 Anxiety and depression are associated with migraine and pain in general: an investigation of the interrelationships 43
Chapter 4 Pain and the onset of depressive and anxiety disorders 61
Chapter 5 Impact of pain on the course of depressive and anxiety disorders. 81
Chapter 6 The impact of chronic somatic diseases on the course of depressive and anxiety disorders. 101
Chapter 7 Pain, not chronic disease, is associated with the recurrence of depressive and anxiety disorders. 119
Chapter 8 Longitudinal association between pain, and depression and anxiety over four years 137
Chapter 9 General discussion 159
Chapter 10 Summary 182
Samenvatting (Summary in Dutch) 188
About the author 194
Dankwoord (Acknowledgements) 195
List of publications 197