



Universiteit
Leiden
The Netherlands

Prevalence, symptoms and risk profiles of apathy at old age

Koolhoven, I.

Citation

Koolhoven, I. (2017, November 7). *Prevalence, symptoms and risk profiles of apathy at old age*. Retrieved from <https://hdl.handle.net/1887/59456>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/59456>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The following handle holds various files of this Leiden University dissertation:
<http://hdl.handle.net/1887/59456>

Author: Koolhoven, I.

Title: Prevalence, symptoms and risk profiles of apathy at old age

Issue Date: 2017-11-07

PREVALENCE, SYMPTOMS AND RISK PROFILES OF APATHY AT OLD AGE

Isis Koolhoven

Title: Prevalence, symptoms and risk profiles of apathy at old age

Author: Isis Koolhoven

ISBN: 978-90-77877-21-0

Artwork: Cover: painting 'Young Apathy' by David Frederik Moussallem

Appearances on the outside and inside: www.proefschriftenmaken.nl

Printed by: www.proefschriftenmaken.nl

Den Haag, Parnassia Groep

©2017 I. Koolhoven, Nieuwerkerk aan den IJssel, the Netherlands

All rights reserved. No part of this publication may be reproduced, stored, or transmitted in any way or by any means, without the prior permission of the author or the copyright owing journals for previously published chapters.

The infrastructure for the NESDO study (<http://nesdo.amstad.nl>) is funded through the Fonds NutsOhra (project 0701-065), Stichting tot Steun VCVGZ, NARSAD The Brain and Behavior Research Fund (Grand Id 41080) and the participating universities and mental health care organizations (VU University Medical Center, Leiden University Medical Center, University Medical Center Groningen, UMC St Radboud, and GGZinGeest, GGNet, GGZNijmegen, GGZRivierduinen, Lentis, and Parnassia).

The infrastructure for the NESDA study (www.nesda.nl) has been funded through the Geestkracht program of the Netherlands Organisation for Health Research and Development (Zon-Mw, grant number 10-000-1002) and participating universities (VU University Medical Center, Leiden University Medical Center, University Medical Center Groningen).

The infrastructure for the PROMODE study was funded by a grant from the Netherlands Organisation for Health Research and Development (ZonMw; grant 945-07-502) and a grant from Rivierduinen, Mental Health Institution.

Financial support for the publication of this thesis by the Parnassia Academy (part of Parnassia Psychiatric Institute) is gratefully acknowledged.

PREVALENCE, SYMPTOMS AND RISK PROFILES OF APATHY AT OLD AGE

Proefschrift
ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof.mr. C.J.J.M. Stolk,
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 7 november 2017
klokke 11.15 uur

door

Isis Koolhoven

geboren te Tilburg

in 1968

Promotor

Prof. dr. R.C. van der Mast

Copromotoren

Dr. H.C. Comijs, GGZ inGeest/VUmc

Dr. P. Naarding, GGNet/UMCG

Promotiecommissie

Prof. dr. W.P. Achterberg

Prof. dr. J. Gussekloo

Prof. dr. M.L. Stek, GGZ inGeest/VUmc

Prof. dr. F.R.J. Verhey, MUMC

Contents

Chapter 1	General introduction and outline of the thesis	7
Chapter 2	Latent Class Analysis of the Apathy Scale does not identify subtypes of apathy in general population-based older persons	21
Chapter 3	Presence and correlates of apathy in non-demented depressed and non-depressed older persons	37
Chapter 4	Apathy in older persons with depression: course and predictors: The NESDO study	53
Chapter 5	Apathy in early- and late-life depression	73
Chapter 6	Quality of life in community-dwelling older persons with apathy	93
Chapter 7	Summary and general discussion	113
	Appendix	129
	Nederlandse samenvatting	133
	Curriculum Vitae	139
	Publicaties	143
	Dankwoord	147

