



Universiteit
Leiden
The Netherlands

The continuum of consciousness in cardiovascular stress research : an experimental expedition

Ploeg, M.M. van der

Citation

Ploeg, M. M. van der. (2018, September 25). *The continuum of consciousness in cardiovascular stress research : an experimental expedition*. Retrieved from <https://hdl.handle.net/1887/66001>

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/1887/66001>

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

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/66001> holds various files of this Leiden University dissertation.

Author: Ploeg, M.M. van der

Title: The continuum of consciousness in cardiovascular stress research : an experimental expedition

Issue Date: 2018-09-25

**The continuum of consciousness
in cardiovascular stress research:
An experimental expedition**

Melanie M. van der Ploeg

This research was supported by a grant from the Netherlands Organization for Health Research and Development (ZonMw: nr. 40-00812-98-11029).

Cover and Lay-out by Anouk Westerdijk, persoonlijkproefschrift.nl

Printing by Ridderprint B.V., Ridderkerk

Cover image from private collection (North Cape, Norway)

ISBN: 978-94-6299-931-2

© 2018, Melanie M. van der Ploeg. All rights reserved. No part of this book may be reproduced in any form by print, photoprint, microfilm, or any other means without written permission from the author.

The continuum of consciousness in cardiovascular stress research: An experimental expedition

Proefschrift

Ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus Prof. mr. C.J.J.M. Stolker
volgens besluit van het College voor Promoties
te verdedigen op dinsdag 25 september 2018
klokke 15:00 uur.

door

Melanie Maria van der Ploeg

geboren te Leiderdorp

in 1986

Promotor:

Prof. dr. J.F. Brosschot

Co-promotor:

Dr. B. Verkuil

Promotiecommissie:

Prof. dr. C. Rieffe

Prof. dr. S. Koole

Prof. dr. W.J. Kop

Dr. H. van Middendorp

Content

Chapter 1: Introduction	8
Part 1: <i>Inducing unconscious stress</i>	
Chapter 2: Peripheral physiological responses to subliminally presented negative affective stimuli: A systematic review	20
Chapter 3: Cardiovascular activity in response to subliminal presentation of threatening and neutral words	64
Chapter 4: Subliminal anger and relax primes show similar cardiovascular activity patterns	84
Chapter 5: Subliminal and supraliminal fear conditioned stimuli increase electrodermal but not cardiovascular responses	100
Part 2: <i>Measuring unconscious stress</i>	
Chapter 6: The Implicit Positive And Negative Affect Test: Validity and relationship with cardiovascular stress-responses	126
Chapter 7: Automatic vigilance is associated with impaired cardiovascular recovery from recalling emotional memories	156
Chapter 8: General Discussion	180
Dutch summary (Nederlandse samenvatting)	196
About the Author	
Publications	
Acknowledgements (Dankwoord)	
References	

