



Universiteit
Leiden
The Netherlands

Contemplations into respiration: effects of breathing and meditative movement on body and mind

Gerritsen, R.J.S.

Citation

Gerritsen, R. J. S. (2023, December 13). *Contemplations into respiration: effects of breathing and meditative movement on body and mind*. Retrieved from <https://hdl.handle.net/1887/3672234>

Version: Publisher's Version

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

Downloaded from: <https://hdl.handle.net/1887/3672234>

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

Contemplations into Respiration

Effects of breathing and meditative movement on body and mind

ISBN: 978-94-6419-987-1

Front image by Roderik Gerritsen with Midjourney AI, using the prompts:
meditating; heart; lungs; *background*: firing neurons.

Cover design by Joris van Schilt.

Copyright © 2023, Roderik Gerritsen

All rights are reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the copyright holder, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

Contemplations into Respiration

Effects of breathing and meditative movement on body and mind

ter verkrijging van

de graad van doctor aan de Universiteit Leiden,

op gezag van rector magnificus prof.dr.ir. H. Bijl,

volgens besluit van het college voor promoties

te verdedigen op woensdag 13 december 2023

klokke 10:00 uur

door

Roderik Jan Sebastiaan Gerritsen

geboren te Utrecht

in 1979

Promotor(es):

Dr. G.P.H. Band

Prof.dr. S.T. Nieuwenhuis

Promotiecommissie:

Prof.dr. S.A.R.B. Rombouts

Prof.dr. D.T. Scheepers

Dr. B. Verkuil

Dr. M.K. van Vugt (Rijksuniversiteit Groningen)

Prof.dr. H.A. Slagter (Vrije Universiteit)

Prof.dr. M.W. van der Molen (Universiteit van Amsterdam)

Content

Chapter 1:	1
General Introduction	
Chapter 2:	21
Breath of Life: the Respiratory Vagal Nerve Stimulation	
Model of Contemplative Activity	
Chapter 3:	77
No Panacea? Tai Chi enhances motoric but not executive functioning in a normal aging population	
Chapter 4:	115
Breath of life: the acute effects of respiratory locus and rate on autonomic activity and inhibitory control	
Chapter 5:	181
General Discussion	
Generale Discussie (Nederlands)	205
References:	231
Acknowledgements:	279
Curriculum Vitae:	280