

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/22834> holds various files of this Leiden University dissertation

**Author:** Harmelen, Anne-Laura van

**Title:** Childhood emotional maltreatment : impact on cognition and the brain

**Issue Date:** 2013-12-10



# CHILDHOOD EMOTIONAL MALTREATMENT:

IMPACT ON COGNITION AND THE BRAIN.

*Proefschrift*

*Ter verkrijging van  
de graad van Doctor aan de Universiteit Leiden,  
op gezag van de Rector Magnificus Prof. mr. C.J.J.M. Stolker,  
volgens besluit van het College voor Promoties  
te verdedigen op dinsdag 10 December 2013  
klokke 13.45 uur*

*door  
Anne-Laura van Harmelen  
geboren te Hilversum  
op 13 augustus 1982*

**CHILDHOOD EMOTIONAL MALTREATMENT**

**PROMOTIECOMMISSIE**

**PROMOTORES:**

Prof. dr. B.M. Elzinga (Universiteit Leiden)  
Prof. dr. Ph. Spinhoven (Universiteit Leiden)  
Prof dr. B.W.J.H. Penninx (Vrije Universiteit)

**OVERIGE LEDEN:**

Prof. dr. K. Roelofs (Radboud Universiteit)  
Prof dr. M.J. Bakermans-Kranenburg (Universiteit  
Leiden)  
Dr. R.J.L. Lindauer (Academisch Medisch Centrum  
Amsterdam)

*'When I remember my childhood pains, I do not think about broken bones, hurt knees, swollen ankles; I remember the pain of being excluded, rejected, isolated'*

*S. Fry, 1997, Moab is my Washpot.*

**CHILDHOOD EMOTIONAL MALTREATMENT**

ISBN: 978-94-6191-931-1

# CONTENTS

<b>CHAPTER 1: GENERAL INTRODUCTION</b>	<b>7</b>
<b>SECTION 1: THE IMPACT OF CHILDHOOD EMOTIONAL MALTREATMENT ON COGNITION</b>	<b>21</b>
CHAPTER 2: CHILD ABUSE AND NEGATIVE EXPLICIT AND AUTOMATIC SELF-ASSOCIATIONS: THE COGNITIVE SCARS OF EMOTIONAL MALTREATMENT.	23
CHAPTER 3: INTRUSIONS OF AUTOBIOGRAPHICAL MEMORIES IN INDIVIDUALS REPORTING CHILDHOOD EMOTIONAL MALTREATMENT	41
<b>SECTION 2: THE IMPACT OF CHILDHOOD EMOTIONAL MALTREATMENT ON BRAIN STRUCTURE</b>	<b>57</b>
CHAPTER 4: REDUCED MEDIAL PREFRONTAL CORTEX VOLUME IN ADULTS REPORTING CHILDHOOD EMOTIONAL MALTREATMENT	59
<b>SECTION 3: THE IMPACT OF CHILDHOOD EMOTIONAL MALTREATMENT ON BRAIN FUNCTIONING</b>	<b>75</b>
CHAPTER 5: ENHANCED AMYGDALA REACTIVITY IN ADULTS REPORTING CHILDHOOD EMOTIONAL MALTREATMENT	77
CHAPTER 6: HYPOACTIVE MEDIAL PREFRONTAL CORTEX ACTIVITY IN ADULTS REPORTING CHILDHOOD EMOTIONAL MALTREATMENT	95
CHAPTER 7: ENHANCED MPFC REACTIVITY TO SOCIAL REJECTION IN YOUNG ADULT PATIENTS AND CONTROLS REPORTING CHILDHOOD EMOTIONAL MALTREATMENT	119
<b>CHAPTER 8: SUMMARY AND DISCUSSION</b>	<b>141</b>
<b>REFERENCES</b>	<b>159</b>
<b>DUTCH SUMMARY</b>	<b>185</b>
<b>PUBLICATION LIST</b>	<b>199</b>
<b>ACKNOWLEDGEMENTS</b>	<b>201</b>
<b>BIOGRAPHY</b>	<b>203</b>

