

# **Overgeneral Memory, Trauma, and Psychopathology in Children**

Caitlin Hitchcock,

BPsych (Hons.)

School of Psychology

Social and Behavioural Sciences

Flinders University

Adelaide, Australia

Thesis submitted to Flinders University  
in partial fulfilment of the requirements for the  
Doctor of Philosophy (Clinical Psychology)

December 2013

## CONTENTS

Summary .....	iv
Declaration .....	vi
Acknowledgements .....	vii
CHAPTER 1 .....	1
Introduction .....	1
Theories of OGM .....	3
CaR-FA-X Model .....	4
Method .....	6
Do Children Demonstrate OGM? .....	7
Previous Evidence for the CaR-FA-X Model in Childhood OGM .....	23
Capture and Rumination .....	24
Reduced Executive Control .....	24
Functional Avoidance .....	26
Developmental Aspects of the Mechanisms .....	26
Summary and Aims of this Thesis .....	27
CHAPTER 2 .....	30
Data Analysis Approach .....	30
CHAPTER 3 .....	34
Study 1 .....	34
Method .....	38
Participants .....	38
Measures .....	39
Procedure .....	43
Results .....	43
Do the CaR-FA-X Mechanisms Apply to This Sample? .....	44
Does Time Moderate the Relationship Between OGM and Psychopathology? .....	48
Discussion .....	50
CHAPTER 4 .....	55
Study 2 .....	55
Method .....	62
Participants .....	62
Measures .....	63
Procedure .....	66
Results .....	66
Do Rumination, Inhibition, and Cognitive Avoidance Predict Specificity? .....	69
Relationship with Psychological Symptoms .....	71
Discussion .....	76

CHAPTER FIVE.....	83
Introduction.....	83
Study 3 .....	89
Method .....	90
Participants .....	90
Measures.....	91
Procedure.....	94
Results and Discussion.....	94
Data Analysis Approach.....	94
Manipulation Checks.....	95
Hypothesis Testing .....	96
Psychological Symptoms .....	97
Conclusion.....	98
Study 4 .....	100
Method .....	101
Participants .....	101
Materials.....	102
Procedure.....	104
Results and Discussion.....	104
Manipulation Checks.....	104
Hypothesis Testing .....	105
Conclusion.....	109
Discussion .....	109
CHAPTER 6 .....	117
General Discussion .....	117
How time since trauma exposure influences OGM-symptom relationships .....	118
The CaR-FA-X Model in Childhood OGM .....	129
Theoretical Underpinnings of OGM’s Change from Adaptive to Maladaptive....	137
Clinical Implications .....	138
Conclusion.....	139
References.....	141
Appendix A .....	158
Study 1 Cue Words for Autobiographical Memory Test.....	158
Appendix B .....	159
Study 2 Cue Words for Autobiographical Memory Test.....	159
Appendix C .....	160
Study 3 Autobiographical Memory Test Instructions by Retrieval Condition .....	160
Avoid Condition .....	160

Specific Condition.....	160
Control Condition.....	161
Appendix D.....	162
Affect Rating Scale for Study 3 and Study 4.....	162
Appendix E.....	163
Study 4 Autobiographical Memory Test Instructions by Retrieval Condition.....	163
Avoid Condition.....	163
Specific Condition.....	163
Distraction Condition.....	164

## Summary

Overgeneral memory (OGM) occurs when an individual demonstrates impaired retrieval of specific, single incident events from autobiographical memory. OGM theorists have argued that childhood trauma will increase OGM as this retrieval style will be adaptive for emotion regulation in the short term following trauma. However, OGM is thought to become associated with psychopathology if maintained over the longer term (Williams, 1996). This proposition has not been directly tested, although OGM is consistently associated with persistent depression in adolescents (see Hitchcock, Nixon, & Weber, 2013, for recent review of childhood OGM). Further, it is unclear how OGM relates to paediatric posttraumatic stress disorder (PTSD). Better understanding of whether the relationship between OGM and psychopathology may change over time will indicate at what point certain clinical interventions may be optimally timed following childhood trauma (especially those that target memory retrieval processes). This thesis comprised the first examination of OGM and the course of psychological symptoms in young people exposed to trauma. This investigation was driven by two research questions. First, how does OGM relate to psychopathology following childhood trauma exposure? In particular, I explored how OGM related to symptoms of PTSD and depression, and whether time since trauma moderated these relationships. Second, does the CaR-FA-X model (Williams et al., 2007) adequately explain childhood OGM? Specifically, key components of the model, namely the capture and rumination, functional avoidance, and executive control mechanisms, were assessed.

Study 1 longitudinally examined OGM and the development of psychological symptoms over six months following childhood trauma exposure. The capture and rumination, and executive control mechanisms of the CaR-FA-X model were also assessed. Results indicated that the relationship between OGM and PTSD symptoms

changed over time. Interestingly, OGM was negatively related to PTSD symptoms at six months post-trauma. No evidence was found for a relationship between OGM and depression, or for the assessed CaR-FA-X mechanisms to explain OGM. Study 2 built upon these findings by providing preliminary, cross-sectional evidence that the relationship between OGM and PTSD symptoms may continue to change years after trauma exposure. All three mechanisms of the CaR-FA-X model were assessed to thoroughly test the theory. No evidence was found for the CaR-FA-X model as a whole, although some results were consistent with the proposed role of functional avoidance. Based on these results, Study 3 and Study 4 experimentally assessed the key assumptions of functional avoidance. Results indicated that overgeneral retrieval of memories of an adverse event regulated affect. This provided further support for the hypothesised role of the functional avoidance mechanism.

Three main conclusions were drawn from results. First, findings indicated that OGM may initially be adaptive for mood regulation, and also PTSD symptoms, following childhood trauma. At this initial stage, functional avoidance appears to explain OGM. Second, OGM may change to become maladaptive if used in the longer term. This change may occur years after exposure, and at this point OGM may become associated with depression. Once maladaptive, the capture and rumination, and executive control mechanisms of the CaR-FA-X model may become operational. Finally, the mechanism underlying OGM's change from adaptive to maladaptive is unclear. Theory and previous research suggest this may occur due to OGM generalising from a trauma memory to retrieval of other autobiographical memories. Further research on the trajectory of OGM following childhood trauma, and the cognitive processes underlying the retrieval style will improve the efficacy of emerging clinical interventions. Ultimately, further understanding of OGM may help to reduce the impact and severity of psychopathology following childhood trauma.

## **Declaration**

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Caitlin Hitchcock, BPsyc (Hons.)

## Acknowledgements

A big thank you to Reg Nixon for his guidance, support, and cognitive restructuring during this project. I very much appreciate your ability to understand my vague musings and your help in developing these ideas.

Many thanks to Nathan Weber for his advice on writing, measuring and manipulating cognitive factors, and most of all, statistical analysis. Thank you for expanding my knowledge and the quality of my work.

This thesis would not have been possible without the schools and families who participated in this research. Thank you also to the staff at Flinders Medical Centre and the psychology work experience students who assisted in recruitment for this research.

Lastly, thank you to those special people in my life who stood by me (and tolerated me) for the last four years. To Nicole, Nicky, Rachel, Sam, Mel, Anne, Mike, Lydia and Tomoko, thank you for sharing this crazy ride with me. This experience was made so enjoyable by our lunch breaks, sharing the hen pit, office rules, sneaky ciders, your funny stories, GG episodes, birthday cupcakes, Lucky Lupita's, Schnitmas, and the many discussions on the downfalls of Endnote and different statistical analyses.

To my family, without your support I would never have been able to complete this thesis (and then I really would have been a professional student). Mum, Dad, Cameron and Lewis, thank you for always believing in me. Your constant encouragement kept me determined to achieve my goal. And to Reece, thank you for your understanding, and cheering me up when things got me down.