

The Development, Maintenance and Treatment of Intrusive Autobiographical Memories in Depression

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the degree of

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under the supervision of Associate Professor David Berle and Dr
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I, Adele Stavropoulos, declare that this thesis, is submitted in fulfilment of the requirements for the award of *Doctor of Philosophy (Clinical Psychology)*, in the *Graduate School of Health, Discipline of Clinical Psychology*, at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis. This document has not been submitted for qualifications at any other academic institution. This research is supported by the Australian Government Research Training Program.

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LIST OF PAPERS/PUBLICATIONS INCLUDED

The format of this thesis is by compilation. This thesis comprised of three studies, which formed seven peer-reviewed journal articles. Study one consisted of papers one and two, study two consisted of paper five, and study three consisted of papers three, four, six and seven.

Peer-reviewed journal articles:

Paper 1 (published) Stavropoulos, A., & Berle, D. (2020). The influence of ruminative processing mode on the trajectory of intrusive memories following a negative mood induction. *Journal of Behavior Therapy and Experimental Psychiatry*, 68, 101528. <https://doi.org/10.1016/j.jbtep.2019.101528>

Paper 5 (published) Stavropoulos, A., Haire, M., Brockman, R., & Meade, T. (2020). A schema mode model of repetitive negative thinking. *Clinical Psychologist*, 24, 99 - 113. <https://doi.org/10.1111/cp.12205>

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Paper 2 (submitted/under review) Stavropoulos, A., Brockman, R., & Berle, D. The temporal sequence of intrusive memories and rumination following a negative mood induction. *Cognitive Therapy and Research*

Paper 3 (submitted/under review) Stavropoulos, A., Brockman, R., Hayes, C., Rogers, K., & Berle, D. A Single Case Series of Imagery Rescripting of Intrusive Autobiographical Memories in Depression. *Behaviour Research and Therapy*

Paper 4 (submitted/under review) Stavropoulos, A., Rogers, K., & Berle, D. The course of intrusive memory characteristics among people receiving imagery rescripting for depression: A preliminary investigation of daily-assessment data. *Behavior Therapy*

Paper 6 (submitted/under review) Stavropoulos, A., Brockman., & Berle, D. Changes in schema modes over the course of imagery rescripting treatment for depression.

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Paper 7 (submitted/under review) Stavropoulos, A., Brockman, R., & Berle, D. The Application of imagery rescripting to intrusive autobiographical memories in depression. *Cognitive and Behavioral Practice*

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Stavropoulos, A. Brockman, R., & Berle, D. (October, 2020). *A Single Case Series of Imagery Rescripting in Depression*. Eposter presented at Society for Mental Health Research Virtual Conference.

Stavropoulos, A., Brockman, R., & Berle, D. (November, 2020). *A Single Case Series of Imagery Rescripting in Depression*. Invited address at the 2nd Annual Schema Therapy at the Coalface Conference, University of Technology Sydney, Sydney, Australia.

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Baulch, E. (2020). Think less, feel more. *Graduate School of Health*. accessible from:

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STATEMENT OF CONTRIBUTION OF AUTHORS

Paper 1

Title: The Influence of Ruminative Processing Mode on the Trajectory of Intrusive Memories following a Negative Mood Induction

Authors: Adele Stavropoulos, David Berle

First Author Contribution: conceptual contribution, design of study, collection of data, data analysis, writing of paper

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Paper 2

Title: The temporal sequence of intrusive memories and rumination following a negative mood induction.

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Paper 3

Title: A Single Case Series of Imagery Rescripting of Intrusive Autobiographical Memories in Depression

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Paper 4

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Paper 6

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Authors: Adele Stavropoulos, Robert Brockman, David Berle

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ABSTRACT

This program of research investigated the role of intrusive memories and rumination in the onset and maintenance of depression, as well as the treatment of these processes. Paper one examined the association between ruminative processing mode and the trajectory of intrusive memories over a 6 hour time period following a negative mood induction. Three classes were found following the video (intrusion free, rapid remitters, slow remitters). Processing mode did not influence the frequency of intrusive memories or predict class membership. Paper two examined whether there are bidirectional relationships between rumination and intrusive memories over the same period of time. A one-way relationship was found whereby rumination predicted future intrusive memories and further rumination, yet this relationship was not bi-directional. Paper three examined whether 12 weekly sessions of imagery rescripting was associated with reductions in symptoms in a clinically depressed sample. Following the treatment, there were significant reductions in symptoms, 87% of participants showed reliable improvement and 80% showed clinically significant improvement and no longer met diagnostic criteria for MDD. This represented a large effect size. Paper four examined whether the characteristics of intrusive memories and ruminative responses to these memories also changed over the course of this treatment. Intrusive memory distress and rumination were found to reduce over the course of treatment. Reduction in depressive symptoms was independent of the level of intrusion characteristics, yet participants who reported higher levels of rumination were found to improve at a slower rate over the course of treatment. Paper five examined whether repetitive negative thinking can be conceptualised as a maladaptive coping mode ‘over-analysing’ consistent with Young’s schema mode model (Young, Klosko & Weishaar. 2003). Correlational and mediation analysis provided support for this model in which the relationship between angry and vulnerable child modes, and worry, rumination, and repetitive negative thinking,

respectively, was mediated by experiential avoidance. Paper six examined the changes in schema modes, as well as the relation between these modes and depression symptoms over the course of imagery rescripting treatment for depression. While seven schema modes significantly reduced over the course of treatment, improvement in depression symptoms was not influenced by changes in any of the modes. Finally, Paper seven used two case examples to describe the clinical application of imagery rescripting in depression. The findings from this program of research support the use of imagery rescripting in the treatment of intrusive memories, rumination and depression symptoms.