

Eating Disorder Symptomatology and Mindfulness: are they related and what is their
influence on Body Image, Identity, Personality and Quality of Life?

Emma Prowse

B Science (Hons)

Submitted to the Department of Psychology,
The University of Newcastle, November 2011, in
fulfilment of the requirements for the degree
of Doctorate of Clinical Psychology.

The thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

PUBLICATIONS

Chapter 2 of this thesis is in the form of a journal article which has been submitted and accepted for review by the journal *Eating Disorders*:

(Under Review). Eating Disorder Symptomatology and Mindfulness: are they related, what is their influence on Body Image, Identity, Personality and Quality of Life, and what does this mean for Clinical Intervention? *Eating Disorders*.

Portions of this research were presented at the following conference:

Prowse, E., Bore, M., & Dyer, S. (2010). The Relationship between Eating Disorder Symptoms and Mindfulness and their Influence on Body Image, Identity, Personality and Quality of Life. Society for Psychotherapy Research Conference, 9-10 December, 2010.

Prowse, E., Bore, M., & Dyer, S. (2011). The relationship between eating disorder symptoms and mindfulness and their influence on body image in 1st year psychology students. 46th APS Annual Conference, Canberra, 4-8 October 2011

ACKNOWLEDGMENTS

I would like to express my gratitude towards Dr Miles Bore for this supervision of my thesis, his good humour, patience, wisdom and encouragement from the beginning till the end. I would also like to thank Ms Stella Dyer for her supervision of this thesis, as well as her knowledge, assistance with recruitment, support and reassurance.

My appreciation also goes to the team at the Centre for Psychotherapy for assisting with recruitment and providing diagnostic information from assessments conducted with the consent of participants. I would like to thank Aurora Sacchetti and Laura Sacchetti for their help with proof reading and formatting, as well as of their ongoing support.

ABSTRACT

Scope: The current study was designed to investigate the relationship between mindfulness and eating disordered symptom to inform treatment. Additionally, underlying factors including body image, self control, sense of self, identity, negative affect and distress, personality and quality of life, were also investigated in order to increase understanding about eating disorders and the interaction of these factors with the individuals' capacity to be mindful.

Purpose: There has been increasing interest in the use of mindfulness and acceptance based therapies in treating various disorders and conditions, however evidence to support the application of mindfulness-based treatments for eating disorders is limited. The theoretical underpinnings of mindfulness-based approaches focus on underlying issues rather than eating behaviour itself. The importance of the research included in this thesis is highlighted by the serious health risks associated with eating disorders, as well as the inadequacies recognised with CBT as a psychological intervention for eating disorders.

Methodology: This research consisted of two studies. In Study 1 a battery of questionnaires including: the Eating Disorder Examination – Questionnaire, Kentucky Mindfulness Inventory, the Body Image Acceptance and Action Questionnaire, the Ego Identity Processes Questionnaire, Sense of Self Inventory and a measure of the Big 5 traits of personality; was administered online to first year psychology students at an Australian University (N=411). In Study 2 people diagnosed with an eating disorder presenting to a specialist service in NSW, Australia for treatment (N=10) completed the battery.

Results: Study 1 results in the student sample indicated a strong negative relationship between eating disorder symptoms and acceptance of body image. Observing alone as a

mindfulness skill was related to higher reported eating disorder symptoms, however the mindfulness skills acceptance without judgment and action with awareness were related to lower eating disorder symptoms. Body image Study 2 results also provided further evidence for this relationship, with the clinical population producing a lower than average capacity for Mindfulness. Further, findings in Studies 1 and 2 provided evidence of an association between eating disorder symptomatology and additional factors including body image, sense of self, self compassion, personality, self control and quality of life, as well as high co-morbidity with other Axis I and Axis II mental health disorders.

General Conclusions and Implications: These findings are consistent with theory that certain aspects of Mindfulness (especially acceptance without judgment and action with awareness) play a role in reducing distress, providing some support for a possible role of mindfulness based interventions in treating Eating Disorders and additional evidence for the application of Mindfulness based treatment approaches in this population. Moreover, relationships with additional factors as well as high levels of co-morbidity highlight the need for thorough assessment and support the holistic psychological treatment approaches, focusing on the whole person rather than specifically targeting eating disordered thoughts and behaviour.

TABLE OF CONTENTS

		Page
CHAPTER 1:	Critical review	1
	Eating disorders	2
	Treatment for Eating Disorders	4
	Mindfulness	5
	Self Control	6
	Psychological Distress and Negative Affect	7
	Body Image	7
	Self Compassion	9
	Sense of Self and Identity	10
	Personality	11
	Personality Disorders in Eating Disordered	
	Population	14
	General Aims and Hypotheses	15
CHAPTER 2:	Study 1	18
	Introduction	20
	Method	24
	Results	29
	Discussion	40
CHAPTER 3:	Study 2	46
	Introduction	46
	Method	47
	Results	50
	Discussion	61

CHAPTER 4:	General Discussion	66
	Areas of Additional Importance	73
	Additional Limitations of the Current Research	77
	Contributions of the Current Research and Clinical Implications	77
	Areas for Future Research	79

LIST OF TABLES

Table 1:	Sample Means and Standard Deviations, Norm Means and Standard Deviations, and Cronbach's Alpha Coefficients for Eating Disorder Measures.	31
Table 2:	Sample Means and Standard Deviations, Norm Means and Standard Deviations, and Cronbach's Alpha Coefficients for Mindfulness Scale.	34
Table 3:	Correlations between Eating Disorder Symptoms, Body Image, Mindfulness, Identity, Personality, Psychological Distress and Quality of Life.	35
Table 4:	Regression Model for Eating Disorder Symptoms (EDE-Q).	38
Table 5:	Regression Model for Body Image (BI-AAQ).	39

LIST OF FIGURES

Figure 1:	Histogram of EDE-Q scores of female participants.	32
Figure 2:	Histogram of EDE-Q scores of male participants.	33
Figure 3:	Line plot of each participant's score for Eating Disorder, Body Image and Mindfulness compared to the norm and the mean of the student sample scores from Study 1.	51
Figure 4:	Line plot of each participant's score for Identity, Sense of Self and Self Compassion compared to the norm and the mean of the student sample scores from Study 1.	51
Figure 5:	Line plot of each participant's score for Personality and Self Control compared to the norm and the mean of the student sample scores from Study 1.	52

Figure 6:	Line plot of each participant's score for Stress, Anxiety, Depression and Personal Wellbeing compared to the norm and the mean of the student sample scores from study 1.	52
Figure 7:	Profile of clinical and student samples for Eating Disorder Symptoms, Body Image and Mindfulness in comparison to norm mean for each scale.	53
Figure 8:	Profile of clinical and student samples for Identity, Sense of Self and Self Compassion in comparison to norm mean.	54
Figure 9:	Profile of clinical and student samples for Personality and Self Control in comparison to norm mean.	55
Figure 10:	Profile of clinical and student samples for Stress, Anxiety, Depression and Personal Wellbeing in comparison to norm mean for each scale.	56
Figure 11:	Profile of eating disorder, co-morbid Axis II and student samples for Eating Disorder Symptoms, Acceptance of Body Image and Mindfulness skills in comparison to the norm mean.	57
Figure 12:	Profile of Eating Disorder, Co-morbid Axis II and Student samples for Identity, Sense of Self and Self Compassion in comparison to the norm mean.	58
Figure 13:	Profile of eating disorder, co-morbid Axis II and student samples for Personality and Self Control in comparison to the norm mean.	59
Figure 14:	Profile of eating disorder, co-morbid Axis II and student samples for Stress, Anxiety, Depression and Personal Wellbeing in comparison to the norm mean for each scale.	60
REFERENCES		82
APPENDICES		95
Appendix 1: Evidence that Journal Article is currently under Peer Review		95
Appendix 2: Additional Results: Study 1		97
Appendix 3: Battery of Questionnaires		104