

**THE ROLE OF SELF-REGULATION IN DECISION
MAKING BY ENTREPRENEURS**

**Peter Thomas Bryant
BA (Hons 1st Class), University of Sydney**

**A thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy (PhD)**

**Macquarie Graduate School of Management
Macquarie University
Sydney, Australia**

July 2006

CERTIFICATION OF ORIGINAL AUTHORSHIP

This thesis is submitted in fulfillment of the requirements of the degree of PhD, in the Graduate School of Management, Macquarie University. This represents the original work and contribution of the author, except as acknowledged by general and specific references. I hereby certify that this has not been submitted for a stronger degree to any other university or institution.

A handwritten signature in black ink, appearing to read 'P. Bryant', is centered on the page. The signature is fluid and cursive, with the first letter 'P' being particularly large and stylized.

Signed by Peter Thomas Bryant on 17 July 2006

ACKNOWLEDGMENTS

My adviser at the Macquarie Graduate School of Management, Professor Richard Dunford, has been a constant source of scholarly wisdom and sound advice. As a colleague, coach and counsellor, he deserves my sincere thanks and acknowledgement. Others have provided valuable support and encouragement as well. Firstly, I wish to thank my friend and fellow PhD student, Dau-Chuan Chung, who often challenged my thinking and caused me to sharpen my pen. Secondly, I wish to thank academic colleagues who have read and commented on sections of my work: Willem Selen, Hugo Kehr, Robert Wood, Ivo Zander and John Rodwell. Most of these helpful interactions came through our shared connection with the Macquarie Graduate School of Management.

I also wish to express my sincere thanks to Dr Pat Bazely. I visited her research farm near Sydney on three occasions during the course of my research. Each time, I gained immense benefit from Pat's erudition and insightful criticisms, especially on methodological issues. She also hosts a great dinner table.

Other help came from anonymous sources, in the form of reviewer comments for the Academy of Management (AOM) annual meetings held in 2004, 2005 and 2006, as well as the Australia New Zealand Academy of Management (ANZAM) annual meetings held 2004 and 2005. Papers based on my thesis research were accepted for each. While I do not know the reviewers' identities, I wish to acknowledge their generous service to the Academies and myself. I also gratefully acknowledge the generous support from my school at Macquarie University and from my employer, The University of Sydney, which allowed me to attend those conferences.

Finally, and most importantly, without the support, love and encouragement of my dear parents, I could not have attempted this thesis. I dedicate it to them.

ABSTRACT

This thesis explores the role of self-regulation in decision making by entrepreneurs. It builds on prior research which has focused on the cognitive aspects of key decisions made by entrepreneurs. Among these key decisions are career choice, opportunity evaluation and opportunity exploitation. One area of this ongoing research program is the exploration of social cognition and self-regulatory factors in decision making. However, this area of research is still in its infancy, significant gaps remain and there are no coherent theories about such phenomena in the field of entrepreneurship. The purpose of this thesis is to contribute to theory development on these topics.

The thesis pursues these goals as an exploratory mixed methods multiple case study, investigating the relationship between self-regulation and decision making conceived as embedded processes of individual entrepreneurs as decision makers. The thesis is mixed methods because it combines both quantitative and qualitative techniques. I survey and interview 30 founder entrepreneurs and survey a control group of 30 employee managers. I use results derived from the survey data to compare entrepreneurs and managers in terms of their relative self-regulatory characteristics, and I then rank the entrepreneurs in those terms. Those results are combined with data gathered through interviews with the 30 entrepreneurs. The findings suggest significant relationships between self-regulation and the following important areas of decision making by entrepreneurs: decision styles, career choice, opportunity risk, the use of heuristics, the management of heuristic bias, decision speed and the role of values and ethics in decision making. Overall, the thesis contributes to the literatures on entrepreneurship, self-regulation and decision making.

TABLE OF CONTENTS

CERTIFICATION OF ORIGINAL AUTHORSHIP	I
ACKNOWLEDGMENTS	II
ABSTRACT	III
TABLE OF CONTENTS	IV
LIST OF TABLES.....	VII
LIST OF FIGURES.....	VIII
CHAPTER 1: INTRODUCTION	1
BACKGROUND TO THE RESEARCH	1
RESEARCH QUESTIONS.....	6
RATIONALE FOR THE RESEARCH	14
METHODOLOGY	17
OUTLINE OF THE THESIS	21
DELIMITATIONS OF SCOPE AND KEY ASSUMPTIONS.....	23
CONCLUSION	25
CHAPTER 2: LITERATURE ON ENTREPRENEURSHIP, SELF- REGULATION AND DECISION MAKING	27
INTRODUCTION	27
MAJOR THEMES.....	28
ENTREPRENEURSHIP	32
SELF-REGULATION	44
DECISION MAKING	60
SELF-REGULATION AND DECISION MAKING	74
CONCLUSION	78
CHAPTER 3: LITERATURE ON DECISION MAKING BY ENTREPRENEURS	79
INTRODUCTION	79
DECISION STYLES	84
ENTREPRENEURIAL CAREER CHOICE	86
OPPORTUNITY RISK.....	88
HEURISTICS AND DECISION MAKING	95
STRESSORS AND HEURISTIC BIAS	97

DECISION SPEED.....	105
VALUES AND ETHICS IN DECISION MAKING.....	106
CONCLUSION	111
CHAPTER 4: METHODOLOGY	114
INTRODUCTION	114
METHODOLOGY AND ENTREPRENEURSHIP RESEARCH.....	115
PHILOSOPHICAL FOUNDATIONS.....	118
RESEARCH DESIGN	122
SELECTION OF CASES	127
DATA COLLECTION METHODS.....	131
DATA ANALYSIS.....	134
ROBUSTNESS OF METHODOLOGY	138
LIMITATIONS OF THE THESIS	140
ROLE OF THE RESEARCHER.....	142
CONCLUSION	144
CHAPTER 5: RESULTS	145
INTRODUCTION	145
SURVEY RESULTS	146
INTERVIEW RESULTS	152
DECISION STYLES	154
CAREER CHOICE.....	156
OPPORTUNITY RISK.....	162
DECISION HEURISTICS	168
MANAGING HEURISTIC BIAS	177
DECISION SPEED.....	179
VALUES AND ETHICS	184
CONCLUSION	190
CHAPTER 6: DISCUSSION OF EMPIRICAL FINDINGS.....	192
INTRODUCTION	192
SURVEY FINDINGS.....	195
DECISION STYLES	197
CAREER CHOICE.....	199
OPPORTUNITY RISK.....	202

HEURISTICS	206
DECISION SPEED.....	208
VALUES AND ETHICS	210
SUMMARY OF FINDINGS.....	217
IMPLICATIONS FOR FUTURE RESEARCH.....	219
IMPLICATIONS FOR PRACTICE	223
LIMITATIONS	225
CONCLUSION TO THE THESIS.....	226
APPENDICES	229
APPENDIX A: PARTICIPANT CONSENT LETTER	229
APPENDIX B: SEMI-STRUCTURED INTERVIEW GUIDE.....	231
APPENDIX C: REGULATORY FOCUS QUESTIONNAIRE	234
APPENDIX D: ENTREPRENEURIAL SELF-EFFICACY SCALE	236
APPENDIX E: NORMALCY OF ENTREPRENEUR DATA	238
APPENDIX F: NORMALCY OF MANAGER DATA	240
APPENDIX G: ENTREPRENEURIAL-REGULATION CASES	242
REFERENCES.....	243

LIST OF TABLES

TABLE 1.	Characteristics Associated with Stronger Promotion Pride	52
TABLE 2.	Characteristics Associated with Stronger Self-Efficacy	55
TABLE 3.	Summary of Entrepreneur Cases	129
TABLE 4.	Summary of Manager Cases	130
TABLE 5.	Means, Standard Deviations and Correlations for Entrepreneurs	148
TABLE 6.	Means, Standard Deviations and Correlations for Managers	148
TABLE 7.	Entrepreneurial-Regulation Groups	151
TABLE 8.	Entrepreneurial-Regulation and Decision Styles	154
TABLE 9.	Entrepreneurial-Regulation and Entrepreneurial Career Choice.....	157
TABLE 10.	Entrepreneurial-Regulation and Opportunity Risk	163
TABLE 11.	Entrepreneurial-Regulation and Heuristics in Opportunity Evaluation and Exploitation	169
TABLE 12.	Entrepreneurial-Regulation and Decision Speed	179
TABLE 13.	Entrepreneurial-Regulation, Values and Ethics in Decision Making...	185

LIST OF FIGURES

FIGURE 1.	Model of the Parent Literatures	27
FIGURE 2.	Model of Self-Regulation and Decision Making	59
FIGURE 3.	Model of Thesis as Concurrent Nested Strategy	124
FIGURE 4.	Model of Methodology and Methods	125
FIGURE 5.	Model of Entrepreneurial-Regulation and Opportunity Risk	167
FIGURE 6.	Model of Entrepreneurial-Regulation and Career Choice.....	201
FIGURE 7.	Model of Entrepreneurial-Regulation and Risk Taking.....	204
FIGURE 8.	Model of Entrepreneurial-Regulation, Values and Ethics in Decision Making.....	212