

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**DISPOSITIONAL COPING STYLES AND ADULT LITERACY:  
EXPLORING STRESS AND COPING IN ADULT VOCATIONAL  
TRAINING ENVIRONMENTS**

A thesis presented in partial fulfilment of the requirements of the degree of  
Doctor of Philosophy in Psychology  
at Massey University, New Zealand



**Nicola Sheree Murray**

**2009**



---

## ABSTRACT

Since the publication of the International Adult Literacy Survey (IALS) findings in 1996, governments internationally have been cognisant of the need for functional literacy skill training for large segments of the New Zealand working-age population (Culligan<sup>1</sup>, Arnold, Noble, & Sligo, 2004; Ministry of Education, 2001; OECD, 2000). Individuals with low literacy levels generally report negative prior experiences of formal learning environments that are due to and have contributed to their current functional literacy capability (for example, see Neubauer & Dusewicz, 1988; Ross, 1987, 1988; Tilley et al., 2006).

The present study aimed to systematically investigate and measure the dispositional coping styles and strategies associated with differing prose literacy capabilities. The purpose of this project was to provide an understanding of the coping-literacy relationship as a first step toward the development of coping strategy training interventions specifically targeted at improving the educational experience (current and future) of low literacy individuals. Secondary aims of the current study included exploring the relationship between persistence and coping style, adaptability, and prose literacy; determining whether and how coping styles, adaptability, and prose literacy changed over time; and, assessing the relationship between prose literacy, coping style, adaptability, and post-course goal achievement.

Fifty-six students in adult vocational programmes were interviewed pre- and post-course. At each time point assessments of dispositional coping style and strategies via use of the COPE tool (Carver, Scheier, & Weintraub, 1989) were gathered, as were measures of emotional intelligence (including adaptability), and prose literacy score. Participants also took part in a semi-structured qualitative interview which gathered information on their educational and

---

<sup>1</sup> 'Culligan' is the maiden name of the thesis author.

---

employment history, and goals post-course. Situational assessments of coping behaviours outside of the course were also gathered as part of a larger study for future analysis purposes and are outside the scope of this thesis. Respondents were also interviewed at three and six months post-course to determine achievement or non-achievement of post-course goals.

Low prose literacy scores were significantly associated with more frequent use of emotion-focused coping strategies (particularly avoidance). Higher prose literacy scores were significantly associated with more frequent use of problem-focused coping strategies. Indicative data showed that non-persisting participants showed higher emotion-focused coping strategy use than their persisting counterparts alongside lower prose literacy scores. Further, emotion-focused coping, adaptability, and prose literacy score were found to change significantly over time. However, post-course goal achievement was not significantly associated with any of the variables of interest except bivariately with prose literacy.

The model of transactional stress and coping (Lazarus, 1966; Lazarus & Folkman, 1984) and the control theory of self-regulation (Carver & Scheier, 1981, 2000) provided a framework for the discussion of the dispositional coping styles and strategies used by individuals of differing prose literacy ability. It was argued that a negative self-schema of the individual as a learner is developed through prior negative experiences of formal education. It was hypothesised that this negative self-schema, built from a low self-confidence and fear of educational failure and rejection, predisposed the individual to a heightened negative self-focus. This in turn was proposed to direct attention to the self and the associated emotional aspects of a response to a stressor, leading to a bias towards habitual coping strategies of avoidance and less frequent use of problem-focused strategies by this group.

These findings and the associated interpretations have implications for the future development of coping strategy training interventions for individuals with low functional literacy competencies who wish to re-engage with formal education.

---

## ACKNOWLEDGEMENTS

I am deeply indebted to my Chief Supervisor, Associate Professor Fiona Alpass, for her reviews of my work, thoughtful comments, and encouragement over the past four years. I am also very grateful to my co-supervisors, Associate Professor John Podd, and Associate Professor Frank Sligo, who have reviewed my work, offered their support and, in the case of the latter, allowed time away from work duties to conduct this research. Thanks are also due to Dr Jocelyn Handy and Dr Elspeth Tilley who discussed alternative research approaches with me.

I owe immense gratitude to the Department of Communication, Journalism, and Marketing, specifically Associate Professor Margie Comrie and Dr Bronwyn Watson, who offered constant support, encouragement, and much-needed tea breaks to keep me going.

As this thesis was aligned with the FRST-funded *Adult Literacy and Employment* project, I would also like to specifically acknowledge Ms Sharon Benson who assisted me with several organisational aspects of my thesis, making the process of conducting this research just that much easier. The present study was also supported through a scholarship from the Whakatane Historical Society, and I remain very grateful for their support.

To my family, Mum, Dad, Neil, Lisa, Tony, Joy, Ian, Nick, and Stacey, I thank you for the continual encouragement and support you have always shown me. And, to my husband Rob, to whom I dedicate this thesis, your love, support, and patience, while I completed this study, has made this thesis possible.

Finally, to all the adult training providers, and especially, the individuals who took part in this study, thank you for sharing your time and stories with me.



---

**TABLE OF CONTENTS**

<b>ABSTRACT .....</b>	<b>I</b>
<b>ACKNOWLEDGEMENTS.....</b>	<b>III</b>
<b>TABLE OF CONTENTS.....</b>	<b>V</b>
<b>LIST OF TABLES .....</b>	<b>XI</b>
<b>LIST OF FIGURES .....</b>	<b>XII</b>
<b>CHAPTER ONE- INTRODUCTION .....</b>	<b>1</b>
<b>1.1 AIMS OF THE STUDY.....</b>	<b>3</b>
<b>1.2 ORGANISATION OF THE THESIS.....</b>	<b>5</b>
<b>CHAPTER TWO – STRESS AND COPING: A REVIEW .....</b>	<b>6</b>
<b>2.1 THEORETICAL MODELS OF COPING .....</b>	<b>6</b>
2.1.1 TRANSACTIONAL MODEL OF STRESS AND COPING .....	6
2.1.2 STAGES OF COPING .....	54
2.1.3 THE HIERARCHICAL MODEL .....	55
2.1.4 SCALE APPROACHES .....	56
2.1.5 ONE-DIMENSIONAL AND TWO-DIMENSIONAL CONSTRUCTS .....	57
2.1.6 DRIVE REINFORCEMENT MODEL.....	59
<b>2.2 RELATED THEORY .....</b>	<b>59</b>
2.2.1 SCHEMA THEORY .....	60
2.2.2 ATTENTIONAL PROCESSES .....	61
2.2.3 SELF-REGULATION.....	62
2.2.4 COGNITIVE-EXPERIENTIAL SELF THEORY (CEST) .....	69
2.2.5 CRITICISMS OF COPING MEASUREMENT.....	71
2.2.6 EMOTIONAL INTELLIGENCE .....	75
2.2.7 MULTIPLE STRESSORS.....	76



2.2.8 PERSONALITY CHARACTERISTICS .....	78
2.2.9 DISPOSITIONAL AND SITUATIONAL INFLUENCES.....	82
2.2.10 CHANGES OVER TIME .....	86
<b>2.3 COPING STYLES AND FUNCTIONS .....</b>	<b>88</b>
2.3.1 LIMITATIONS TO CROSS-STUDY COMPARISONS.....	88
<b>2.4 SUMMARY .....</b>	<b>101</b>
<b>CHAPTER THREE – ADULT LITERACY: A REVIEW .....</b>	<b>102</b>
<b>3.1 THEORETICAL UNDERSTANDINGS .....</b>	<b>102</b>
3.1.1 AUTONOMOUS MODEL OF LITERACY (FUNCTIONAL LITERACY) .....	106
3.1.2 CRITICISMS OF THE IALS .....	108
<b>3.2 COPING WITH LOW LITERACY LEVELS.....</b>	<b>111</b>
<b>3.3 CHARACTERISTICS OF ADULT LITERACY LEARNERS.....</b>	<b>113</b>
3.3.1 FORMAL EDUCATION.....	113
3.3.2 HEALTH.....	115
3.3.3 OTHER.....	116
<b>3.4 PARTICIPATION IN ADULT EDUCATION .....</b>	<b>117</b>
<b>3.5 PARTICIPATION IN ADULT LITERACY EDUCATION .....</b>	<b>119</b>
3.5.1 PERSISTENCE.....	122
3.5.2 CONFIDENCE .....	123
<b>3.6 SUMMARY .....</b>	<b>125</b>
<b>3.7 THE PRESENT STUDY .....</b>	<b>126</b>
3.7.1 RESEARCH QUESTIONS AND HYPOTHESES .....	129
<b>CHAPTER FOUR - METHOD .....</b>	<b>133</b>
<b>4.1 SAMPLE.....</b>	<b>133</b>
4.1.1 CRITERIA FOR INCLUSION.....	133
4.1.2 SAMPLING FRAME .....	135

---

4.1.3 FINAL SAMPLE .....	136
<b>4.2 TOOLS.....</b>	<b>137</b>
4.2.1 DEMOGRAPHIC INFORMATION .....	137
4.2.2 COPING .....	137
4.2.3 EMOTIONAL INTELLIGENCE .....	139
4.2.4 LITERACY SKILLS .....	141
4.2.5 SEMI-STRUCTURED QUALITATIVE INTERVIEWS .....	141
4.2.6 STRUCTURED TELEPHONE INTERVIEWS .....	142
<b>4.3 PROCEDURE .....</b>	<b>142</b>
<b>CHAPTER FIVE - RESULTS .....</b>	<b>148</b>
<b>5.1 ANALYSES .....</b>	<b>148</b>
<b>5.2 DATA SCREENING.....</b>	<b>148</b>
5.2.1 VALIDITY OF THE EQI: S ADAPTABILITY SUBSCALE .....	149
5.2.2 DATA REDUCTION OF THE COPE TOOL.....	149
5.2.3 SUMMARY .....	160
<b>5.3 SAMPLE DESCRIPTION .....</b>	<b>160</b>
<b>5.4 PERSISTENCE .....</b>	<b>163</b>
5.4.1 DESCRIPTIVE INFORMATION AND PERSISTENCE .....	165
5.4.2 DEMOGRAPHIC INFORMATION .....	165
5.4.3 PERSISTENCE BY TIME VARIABLES .....	167
5.4.4 COPING STYLE AND PERSISTENCE .....	168
5.4.5 ADAPTABILITY AND PERSISTENCE .....	169
5.4.6 PERSISTENCE AND PROSE LITERACY SCORE .....	169
5.4.7 SUMMARY .....	171
<b>5.5 MULTIPLE REGRESSION .....</b>	<b>171</b>
5.5.1 DATA SCREENING .....	172
5.5.2 VARIABLES .....	173

---

5.5.3 HIERARCHICAL REGRESSION OF TIME ONE DATA .....	175
5.5.4 SUMMARY .....	178
5.5.5 SPECIFIC COPING STRATEGIES .....	179
<b>5.6 CHANGES OVER TIME .....</b>	<b>182</b>
5.6.1 DATA SCREENING.....	182
5.6.2 T-TESTS .....	182
5.6.3 SUMMARY .....	183
<b>5.7 GOAL ACHIEVEMENT SIX MONTHS POST-COURSE .....</b>	<b>183</b>
5.7.1 VARIABLES .....	185
5.7.2 LOGISTIC REGRESSION .....	187
5.7.3 SUMMARY .....	189
<b>CHAPTER SIX - DISCUSSION .....</b>	<b>191</b>
<b>6.1 COPING STYLES AND PROSE LITERACY SCORE.....</b>	<b>192</b>
6.1.1 SUMMARY .....	192
6.1.2 DISCUSSION.....	195
6.1.3 EFFICACY OF COPING STYLES AND STRATEGIES.....	195
6.1.4 AVOIDANCE AND LOW LITERACY .....	198
6.1.5 NEGATIVE SELF-SCHEMA .....	201
6.1.6 THREAT AND CHALLENGE .....	202
6.1.7 AFFECT AND COPING RESPONSE .....	205
6.1.8 SELF-FOCUS .....	206
<b>6.2 PERSISTENCE .....</b>	<b>210</b>
6.2.1 SUMMARY .....	210
<b>6.3 CHANGES OVER TIME .....</b>	<b>213</b>
6.3.1 SUMMARY .....	213
<b>6.4 GOAL ACHIEVEMENT .....</b>	<b>216</b>
6.4.1 SUMMARY .....	216

---

<b>6.5 IMPLICATIONS.....</b>	<b>217</b>
<b>6.6 LIMITATIONS .....</b>	<b>221</b>
<b>6.7 FUTURE RESEARCH .....</b>	<b>224</b>
<b>CHAPTER 7 – CONCLUSIONS .....</b>	<b>227</b>
<b>REFERENCES.....</b>	<b>231</b>
<b>APPENDIX A .....</b>	<b>253</b>
INFORMATION SHEET .....	253
<b>APPENDIX B .....</b>	<b>261</b>
DEMOGRAPHIC QUESTIONNAIRE .....	261
<b>APPENDIX C .....</b>	<b>265</b>
THE COPE SCALE, EXAMPLES OF COPE SCALE ITEMS IN A5 PRESENTATION, PARTICIPANT COPE RESPONSE SHEET .....	265
<b>APPENDIX D .....</b>	<b>275</b>
INSTRUCTIONS FOR THE EQ-I: S, EXAMPLES OF EQ-I: S SCALE ITEMS IN A5 PRESENTATION, PARTICIPANT EQ-I: S RESPONSE SHEET .....	275
<b>APPENDIX E .....</b>	<b>283</b>
INSTRUCTIONS FOR THE PROSE TESTS OF APPLIED LITERACY SKILLS .....	283
<b>APPENDIX F.....</b>	<b>287</b>
INTERVIEW SCHEDULE FOR THE FIRST INTERVIEW .....	287
<b>APPENDIX G.....</b>	<b>293</b>
INTERVIEW SCHEDULE FOR THE SECOND INTERVIEW .....	293
<b>APPENDIX H.....</b>	<b>299</b>
INTERVIEW SCHEDULE FOR THE TELEPHONE INTERVIEWS .....	299
<b>APPENDIX I .....</b>	<b>303</b>
VALIDITY CHECK OF THE EQI: S MEASUREMENT TOOL .....	303

---

<b>APPENDIX J.....</b>	<b>309</b>
COPE SUBSCALE CORRELATIONS AT TIME TWO.....	309
<b>APPENDIX K .....</b>	<b>315</b>
BIVARIATE RELATIONSHIPS WITH PROSE LITERACY LEVEL.....	315

---

**LIST OF TABLES**

<i>TABLE 1.</i> CRONBACH ALPHA COEFFICIENTS FOR THE COPE SUBSCALES AT TIME ONE AND TIME TWO .....	152
<i>TABLE 2.</i> INTER-SCALE CORRELATION MATRIX FOR THE COPE SUBSCALES AT TIME ONE .....	155
<i>TABLE 3.</i> SUMMARY OF PARTICIPANT DEMOGRAPHIC INFORMATION ( <i>N</i> = 55) .....	162
<i>TABLE 4.</i> LENGTH OF COURSE BY TYPE OF COURSE .....	163
<i>TABLE 5.</i> SUMMARY OF DEMOGRAPHIC AND COURSE INFORMATION FOR PERSISTING AND NON-PERSISTING INTERVIEWEES .....	166
<i>TABLE 6.</i> MEAN AND RANGE STATISTICS OF POTENTIAL TIME FACTORS SUGGESTED TO INFLUENCE PERSISTENCE BY PERSISTENCE TYPE .....	167
<i>TABLE 7.</i> MEAN PROSE LITERACY SCORE BY LEVEL OF PERSISTENCE ( <i>N</i> = 55) .....	170
<i>TABLE 8.</i> BIVARIATE CORRELATIONS FOR POTENTIAL INFLUENCING VARIABLES ON PROSE LITERACY SCORE .....	174
<i>TABLE 9.</i> BIVARIATE STATISTICS BETWEEN ORIGINALLY PROPOSED IVs AND PROSE LITERACY LEVEL .....	175
<i>TABLE 10.</i> MULTIPLE REGRESSION STATISTICS FOR THE TIME ONE VARIABLES .....	176
<i>TABLE 11.</i> MULTIPLE REGRESSION STATISTICS FOR THE STEP ONE MODEL AT TIME TWO .....	177
<i>TABLE 12.</i> CHANGE IN COPING STYLE, ADAPTABILITY, AND PROSE LITERACY FROM TIME ONE TO TIME TWO .....	183
<i>TABLE 13.</i> PHI COEFFICIENTS OF TIME, COURSE TYPE, AND EDUCATION VARIABLES BY GOAL ACHIEVEMENT .....	186
<i>TABLE 14.</i> BIVARIATE CORRELATIONS BETWEEN TIME TWO IVs AND GOAL ACHIEVEMENT .....	187
<i>TABLE 15.</i> LOGISTIC REGRESSION STATISTICS FOR OVERALL GOAL ACHIEVEMENT GROUP MEMBERSHIP ...	188
<i>TABLE 16.</i> INTER-SCALE CORRELATION MATRIX FOR THE COPE SUBSCALES AT TIME TWO .....	313

---

## LIST OF FIGURES

<i>FIGURE 1.</i> A SIMPLISTIC DIAGRAM OF THE TRANSACTIONAL MODEL OF STRESS AND COPING. ....	8
<i>FIGURE 2.</i> PROBLEM-FOCUSED COPING STRATEGIES BY FREQUENCY OF USE AND LITERACY LEVEL AT TIME ONE.....	179
<i>FIGURE 3.</i> PROBLEM-FOCUSED COPING STRATEGIES BY FREQUENCY OF USE AND LITERACY LEVEL AT TIME TWO.....	180
<i>FIGURE 4.</i> EMOTION-FOCUSED COPING STRATEGIES BY FREQUENCY OF USE AND LITERACY LEVEL AT TIME ONE.....	181
<i>FIGURE 5.</i> EMOTION-FOCUSED COPING STRATEGIES BY FREQUENCY OF USE AND LITERACY LEVEL AT TIME TWO.....	181