

"They just want me to be happy": A study of how Year 10
students in Queensland choose subject pathways for their
senior secondary studies

Submitted by

Therese Ruth Nolan

B. Ed. (Sec.), M. Ed. Lead.

A thesis submitted in partial fulfilment of the requirements for the
degree of Doctor of Education

**Faculty of Education
Australian Catholic University**

Research Services
Locked Bag 4115
Fitzroy
Victoria 3065
Australia

Doctor of Education 2012

Statement of Original Authorship

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have qualified for or been awarded another degree or diploma.

No other person's work has been used without due acknowledgment in the main text of the thesis.

This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

All research procedures reported in the thesis received the approval of the relevant Ethics Committees.

Signature: Therese Nolan

Date: 10 December 2012

Acknowledgments

It gives me great pleasure to publicly acknowledge the people who have contributed significantly to the completion of this thesis.

My Supervisory Team

First and foremost I would like to thank Associate Professor Judith Mulholland, who has been the principal supervisor for the majority of my doctoral candidature. In the last six months of my candidature, Judith transferred her stewardship to Dr Janeen Lamb who had previously been my co-supervisor. Without fail, Judith provided me with in-depth feedback on my draft chapters, and provided insights that lifted this thesis to a scholarly level. Thank you Judith for your patience, keen insight and astute eye for detail. You have taught me a great deal about writing clearly and the enjoyment of qualitative analyses

As my quantitative guru, Dr Janeen Lamb ensured I received absolute support for my quantitative analyses and ably stepped into the role of principal supervisor, pending Judith's imminent retirement. I am grateful for her generosity, commitment to and confidence in my work, all of which have encouraged me greatly. Judith and Janeen, both fine academic scholars, have been essential to the timely completion of this thesis and I am indebted to both for sharing their wisdom and showing me the pleasure and satisfaction in academic research.

I would also like to thank two gentlemen, Associate Professor Denis McLaughlin and Dr Jeffrey Dorman. The former encouraged me to commence this research and the latter provided my initial induction into the world of SPSS and quantitative analysis.

The Participants

This research enquiry could not have occurred without the participation of the schools and the students. In particular I would like to acknowledge the Principals who allowed this research to be conducted on their premises. I also extend my sincere gratitude to the Year 10 students who completed the surveys and participated in the interviews. They took time to complete the two surveys, as well as share their stories and experiences with me. They also allowed me the privilege of documenting these accounts and explanations of how they chose subject pathways and future careers and their generosity contributed to my research endeavour and learning.

Family and friends

To Linda, Carmel, Julie, Berenice, Myra, the Nolan and Wilson families - thank you for your friendship, enthusiasm and support through the various phases of this doctorate which warmed my heart and uplifted my spirits throughout this challenging seven year endeavour. Your love and support were gratefully received.

Last but not least, to my loving husband, Greg, and wonderful children, Scott and Stephanie you demonstrated your enduring patience, perseverance, humour, dependability, commitment, love and dedication to me, without which this achievement could not have been possible. Greg, your practical acts of love, affirmation and support have strengthened and encouraged me throughout the years. This thesis contains approximately 77000 words and I dedicate each and every one of them to you.

Abstract

The impetus for this study was a concern for student selection of appropriate subject pathways for senior secondary studies. Data indicating that large numbers of students chose not to continue with training and education after leaving secondary education led to this research study. In Queensland, approximately 72 per cent of secondary students take an academic subject pathway for their senior secondary studies although only approximately 36 per cent attend a tertiary institution upon graduation (Department for Education and Industrial Relations, 2011; Department of Education Training and Employment, 2010). In addition, approximately 30 per cent of senior secondary students take a vocational subject pathway however only 25.1 per cent undertake further vocational education and training after graduation (Department of Education Training and Employment, 2010). Following secondary schooling 40 per cent of secondary students do not transition to education or training and 10 per cent of this group are not employed in their first year after school (Department of Education Training and Employment, 2010). Thus, the majority of students take academic subject pathways but do not use the qualification for tertiary studies nor do the young Queenslanders who studied a vocational subject pathway capitalise on their decision and continue with further vocational education and training upon graduation from secondary schooling. This is a concern because studies on youth unemployment have identified increased risk of future of long term casual employment or unemployment for those who do not engage in training and education to enhance their employability skills soon after secondary schooling (OECD Secretariat, 2000; Queensland Government, 2002). Moreover, the youth in Queensland face challenges emanating from global and national factors that mean their employment prospects may not be as assured and the future economy may not be as robust as was previously the case. International factors such as globalisation, youth

unemployment and economic recessions interact with the Australian and Queensland economies to affect career pathways of secondary school students. Policies and initiatives introduced by the Australian Government to provide secure career pathways for adolescents are affected by changes to the labour market and economic downturns and these affect the opportunities or constraints facing students upon leaving secondary school in Queensland. Exploration into the dissonance between subject pathway choices and eventual post secondary destinations commenced with this study situated in three selected secondary schools with diverse characteristics and locations in Queensland.

This study included: two self-report surveys administered to a group of Year 10 students, and semi-structured interviews with nine students from this cohort. Quantitative data were analysed for general data which raised several unresolved issues. The three schools were compared and the unresolved issues explored with a thematic analysis of the interview transcripts and the outcomes combined and discussed. Results suggested: academic self-efficacy was a salient predictor of the subject pathways that students would pursue; preferences for activities, skills or interests were not predictors of the subject pathways students would choose; and the schools' subject selection processes had a minimal effect on the career choices students made as most entered year 10 with a firm idea of their intended career. Students reported personal responsibility for their choice of subject pathway and future career at the same time as identifying their families as powerful agents in the choice of career; and teachers in the choice of subjects. Career Guidance Counsellors in the schools were under-utilised by the participants and had little impact on career choice or subject pathway choices. Overall students were found to assess the viability of information used in choosing subject pathways and career options according to how much they trusted the source and this was determined to some extent by the term of their relationship with that source and how closely that information resonated with their "personal first-hand experiences, social networks and social identities "(Dyke, Foskett, & Maringe, 2008). Results of this study

suggest several possible approaches that could be implemented by school administrators and policy makers to provide students with appropriate subject pathway and career advice to smooth the transition for students between secondary studies and their eventual post-school destinations.

Keywords

Adolescent subject pathway choices; adolescent decision making; career planning and advice; vocational education and training subject pathways; academic subject pathways; Year 10 students; family influence; senior secondary studies, academic self-efficacy; youth unemployment; educational reforms.

List of Abbreviations

ACU	Australian Catholic University
CCM	Constant comparative method
FP	Field Position
HREC	Human Research Ethics Committee
OECD	Organization for Economic Co-operation and Development
OP	Overall position (a tertiary entrance rank used in Queensland a State of Australia for selection for university courses)
PALS	Patterns of Adaptive Learning Scale
QCE	Queensland Certificate of Education
QCS	Queensland Core Skills (Queensland State-wide examination for entry into university)
QSA	Queensland Studies Authority
RIASEC	Realistic, Investigative, Artistic, Social, Enterprising and Conventional
RQ	Research question
SD	Standard deviation
SDS	Self-Directed Search
SET Plan	Senior Education and Training Plan
TAFE	Technical and further education
TER	Tertiary Entrance Rank
VET	Vocational education and training
VETiS	Vocational education and training in schools

Table of Contents

Chapter 1 – Overview of the Study	1
1.1 Introduction.....	1
1.2 Prior Research.....	1
1.3 The Research Questions	3
1.4 The Research Design.....	7
1.4.1 Epistemology.....	8
1.4.2 Theoretical Perspective	8
1.4.3 Research Methodology	9
1.4.4 Methods: Quantitative and Qualitative	9
1.4.5 Participants	10
1.4.6 Data Gathering Strategies.....	11
1.5 Significance of the Research.....	11
1.6 The Outline of the Thesis	12
Chapter 2 – Defining the Research Problem.....	14
2.1 Introduction.....	14
2.2 International Context.....	17
2.2.1 Economic Conditions.....	17
2.2.2 Educational Policy	19
2.3 Australian Context.....	23
2.3.1 Economic conditions.....	23
2.3.2 Educational policy	24
2.4 Queensland Context	27
2.4.1 Economic conditions.....	28
2.4.2 Educational policy	29
2.5 The Research Problem.....	34
Chapter 3 – Review of the Literature.....	35
3.1 Introduction.....	35
3.2 Research Problem.....	35
3.3 Structure of Chapter Three	35
3.4 Self.....	36
3.4.1 Vocational Interests	37
3.4.2 Academic Self-Efficacy	39
3.4.3 Career Goals and Career Maturity	42
3.5 Family.....	46
3.5.1 Family Economic Background	46
3.5.2 Family and Adolescent Career Goals	47

3.6	School Environment.....	49
3.6.1	Peers.....	49
3.6.2	Counsellors & Teachers.....	51
3.6.3	Teacher Perceptions.....	53
3.6.4	Subject Perceptions.....	54
3.7	Summary.....	59
Chapter 4 – Design of the Research.....		61
4.1	Introduction.....	61
4.2	Theoretical Framework.....	62
4.2.1	Epistemology: Constructionism.....	63
4.2.2	Theoretical Perspective: Pragmatism.....	63
4.2.3	Methodology: Case Study Design.....	64
4.2.4	Methods: Quantitative and Qualitative.....	65
4.3	Research Design.....	67
4.4	Phase 1: Quantitative Phase.....	69
4.4.1	Participants.....	69
4.4.2	Self-report surveys.....	72
4.4.3	Data Analysis.....	77
4.5	Phase 2: Qualitative Phase.....	78
4.5.1	Participants.....	78
4.5.2	Individual Interviews.....	79
4.5.3	Data Analysis.....	80
4.6	Legitimation & Inference Quality.....	85
4.7	Ethical Issues.....	87
4.8	Summary.....	88
Chapter 5 – Quantitative results: Findings from the self-report surveys.....		90
5.1	Overview.....	90
5.2	Self-Report Surveys.....	91
5.3	Display of Demographic Data.....	92
5.4	Subject choice, interests and abilities.....	94
5.5	Students' subject choice and academic efficacy.....	98
5.6	Students' subject choice and the school environment.....	103
5.6.1	Descriptive Statistics for student subject choice and school environment ..	105
5.7	Students' subject choice and contextual factors.....	106
5.7.1	Descriptive Statistics for student subject choice and contextual factors.....	106
5.8	Summary of Key Findings and Unresolved Issues.....	118
Chapter 6 - Qualitative Results: Findings from the interviews.....		123
6.1	Introduction.....	123
6.2	Revisiting the Context.....	125

6.3	Procedures for Subject Choice.....	126
6.4	Anstey College.....	128
6.4.1	Subjects: Selection.....	129
6.5	Students	129
6.5.1	Tom.....	130
6.5.2	Justin	133
6.5.3	Harry	135
6.5.4	Brad.....	137
6.6	Emergent Themes at Anstey College	139
6.7	Barclough College.....	140
6.7.1	Subjects: Selection.....	141
6.8	Students	141
6.8.1	Kathleen	142
6.8.2	Ruth.....	145
6.9	Emergent Themes at Barclough College	149
6.10	Cranberg College	150
6.10.1	Subjects: Selection.....	150
6.11	Students	151
6.11.1	Stephanie	151
6.11.2	Patrick	154
6.11.3	John.....	157
6.12	Emergent Themes at Cranberg College.....	162
6.13	Unresolved Issues Arising from Quantitative Analysis	162
6.13.1	Unresolved Issue One: OP Subject Pathways	163
6.13.2	Unresolved Issue Two: Gender and Academic Self-Efficacy.....	164
6.13.3	Unresolved Issue Three: Effect of Subject Selection Process.....	166
6.13.4	Unresolved Issue Four: Changes from Academic to Vocational Subject Pathways.....	167
6.13.5	Unresolved Issue Five: Parental Education Levels	168
6.13.6	Unresolved Issue Six: Family Influence on Career Options	169
6.13.7	Unresolved Issue Seven: Teachers	170
6.13.8	Unresolved Issue Eight: Guidance Counsellors	171
6.14	Summary of Overall Themes.....	172
Chapter 7 – Discussion of the Research Findings		175
7.1	Overview.....	175
7.2	Purpose and research questions revisited	175
7.3	RQ1: To what extent does the outcome of the Self-Directed Search affect subject pathway choices?	177
7.3.1	Summary of Discussion of Self-Directed Search results	180

7.4	RQ2: To what extent does academic self-efficacy affect subject pathway choices?..	181
7.4.1.	Summary of Discussion on Academic Self-Efficacy and Subject Choice...	184
7.5	RQ3: How do students make use of school-based subject selection processes?	186
7.5.1	Summary of Discussion on the Effect of the Subject Selection Process	190
7.6	RQ4: How do contextual factors such as family and the school environment, influence students when making subject pathway choices?	191
7.6.1	Summary of discussion of contextual influences	193
7.6.2	Discussion of significance of findings in the light of current literature	194
7.7	Summary of the Inferences from the Quantitative and Qualitative Findings.....	196
Chapter 8 – Conclusions and Recommendations		197
8.1	Research Problem and Purpose.....	197
8.2	Research Questions	197
8.3	Research Design.....	199
8.4	Research Questions Addressed	200
8.4.1	RQ1 - To what extent does the outcome of the Self-Directed Search affect subject pathway choices?	200
8.4.2	RQ2: To what extent does academic self-efficacy affect subject pathway choices?.....	201
8.4.3	RQ 3: How do students make use of school-based subject selection processes?.....	201
8.4.4	RQ4 How do contextual factors such as family and the school environment, influence students when making subject pathway choices? ..	202
8.5	A Diagrammatic Overview of Findings	202
8.6	Conclusions of the Study	205
8.6.1	Contributions to New Knowledge	205
8.6.2	Contributions to School Administrative Practice	205
8.6.3	Contributions to Policy	207
8.7	Recommendations	208
8.8	Limitations of the Research	209
8.9	Recommendations for further research	209
8.10	Conclusion	210
Bibliography		212

List of Appendices

Appendix A – Human Research Ethics Committee Approval	235
Appendix B – Participation and Consent Forms	236
Appendix C – Self-report Survey for Phase 1	246
Appendix D – Self-report Survey for Phase 2.....	258
Appendix E – Semi-structured interview Guides	265

List of Tables

Table 3.1	Field of study of Year 12 completers, by gender, Queensland 2009.....	56
Table 4.1	Phases in this study	68
Table 4.2	Text to codes, theme identification and development of theory.....	83
Table 5.1	Distribution of fathers' highest education levels by student gender.....	93
Table 5.2	Distribution of mothers' highest education levels by student gender.....	93
Table 5.3	Self-Directed Search occupational pathways of males cross tabulated with final pathway choice (N=41)	96
Table 5.4	Self-Directed Search occupational pathways of females matched to final pathway choice (N=27).....	96
Table 5.5	Comparison between school types of the Self-Directed Search occupational pathways and students' subject choices (N=68).....	97
Table 5.6	Number of students who changed subject preferences from Survey 1 to Survey 2 by school type (N=69).....	106
Table 5.7	Level of part-time work and work experience as reported by students from the three schools	111
Table 5.8	Relationship between fathers' educational level, initial subject pathway choice, gender and academic self-efficacy mean.	113
Table 5.9	Relationship between fathers' educational level, final subject pathway choice, gender and academic self-efficacy mean	114
Table 5.10	Relationship between mothers' educational level, initial subject pathway choice, gender and academic self-efficacy mean	115
Table 5.11	Relationship between mothers' educational level, final subject pathway choice, gender and academic self-efficacy mean	116
Table 6.1	Overview of choice patterns and academic self-efficacy scores for interviewees (N=9)	126

List of Figures

Figure 2.1.	Spheres of governmental influence on adolescent career pathways	16
Figure 2.2.	Proportion of 15-19 year olds not in education, unemployed or not in the labour force in OECD countries (2009)(OECD, 2011, p. 344).....	18
Figure 2.3	Main destinations of Year 12 Queensland completers, 2008	32
Figure 2.4	Main destinations of Year 12 Queensland completers, 2011	33
Figure 3.1	Influences on adolescents' subject pathway choices	36
Figure 4.1	Steps of the constant comparative analysis procedure (Boeije, 2002, p. 396)	82
Figure 4.2	Diagrammatic view of research phases	89
Figure 5.1	Box plots of academic self-efficacy scores for students indicating OP or VET subject pathways	100
Figure 5.2	Mean scale score for academic self-efficacy according to gender	101
Figure 5.3	Mean scale score for academic self-efficacy according to male students and school type	102
Figure 5.4	Mean scale score for academic self-efficacy according to female students and school type	103
Figure 5.5	Frequency of student self-identified influencers on career paths according to school type.....	108
Figure 5.6	Content of parent discussions with students prior to subject selection processes according to school type.....	109
Figure 5.7	Most valuable sources of information as reported by the students according to school type.....	110
Figure 6.1	Subject Choice Procedures at each case site	127
Figure 8.1	Diagrammatic view of factors that affect subject choice	204