Psychological Wellbeing as a Consequence of Situational Elements

in the New Labour Market

Thesis submitted by

Duncan McIntyre

23rd June 2005

This thesis was submitted in partial fulfilment of the requirements for the Degree of

Doctor of Psychology in the School of Psychology, James Cook University
Statement of Access to Thesis

I, the undersigned author of this work, understand that James Cook University will make this thesis available for use within the University Library and, via the Australian Digital Theses network, for use elsewhere.

I understand that, as an unpublished work, a thesis has significant protection and the Copyright Act and;

I do not wish to place any further restriction on access to this work.

________________________________________  ______________________
Signature                      Date
Electronic Copy

I, the undersigned, the author of this work, declare that the electronic copy of this thesis provided to the James Cook University Library, is an accurate copy of the print thesis submitted, within the limits of the technology available.

___________________________  ____________________
Signature      Date
Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

___________________________  ____________________
Signature      Date
Acknowledgments

**Academic**

First and foremost I would like to thank my supervisor, Dr. Kingsley Tonkin for his academic guidance, exhaustive revisions and for helping me to negotiate mood-troughs along the way. I would also like to thank Professor Ed Helmes for his backdrop of support (and for keeping the faith), and Dr. Peter Creed who provided the inspiration for the project. I also take this opportunity to acknowledge Ms Rochelle Doherty (Secretary to the School of Psychology), who provided many words of encouragement, complete with photocopy codes and paper along the way.

**Professional**

I would also like to acknowledge the support of management at my various places of work. Specifically, I would like to thank Mr Brian Small & Ms Sandra Macdonald (*Centrelink*) and Ms Susan Carr (*ATODS*) for without their approval of periodic part-time work arrangements my thesis journey would have been even more difficult. I also take this opportunity to thank all the call centre operators who participated in the research.

**Personal**

I would like to thank my families for their support and encouragement, my folks for checking on me, and my sister, who from the other side of the world kept calling and sending cards encouraging and supporting my journey – love you Nic. Above all, I would like to thank my confidant and partner, the woman who believed in me, and who encouraged my determination with love and support – love you Mims.
In loving memory of

Sister Elizabeth Julian of the Divine Compassion – my Grandma
# TABLE OF CONTENTS

ABSTRACT.........................................................................................................................................xiv

CHAPTER ONE: IMPLICATIONS FOR THE NEW LABOUR MARKET ............ 1

1.1 OVERVIEW 1

1.2 THE NEW LABOUR MARKET 1

1.2.1 Scientific Management 2

1.2.2 Scientific Management of ‘White-Collar’ Work 3

1.2.3 Customer Service In The New Labour Market 4

1.2.4 Investment in call centre business 5

1.3 CALL CENTRE OPERATIONS 5

1.3.1 The call centre operator work role 6

1.4 DEMANDS OF THE CALL CENTRE OPERATOR WORK ROLE 8

1.4.1 Mental Demands of Call Centre Work 9

1.4.1.1 Information handling 9

1.4.1.2 Cognitive fatigue 9

1.4.1.3 Temporal and contextual factors affecting task performance 10

1.4.2 Electronic performance monitoring in call centres 11

1.4.2.1 Supervisory relations in the call centre 12

1.4.2.2 Teamwork within call centres 13

1.4.2.3 Quantitative versus qualitative performance expectations 14

1.4.3 Physical Demands of Call Centre Work 15

1.4.3.1 Working with Visual Display Terminals 15

1.4.3.2 Vision, hearing and voice disorders associated with call work 17

1.4.4 Emotional Labour in the Call Centre 17

1.4.4.1 Emotional labour in customer service work roles 18

1.4.4.2 Emotional labour in the call centre operator work role 18

1.4.4.3 Emotional dissonance in call centre work 19

1.5 WITHDRAWAL BEHAVIOUR: ABSENTEEISM, TENURE PROJECTIONS AND TURNOVER 21

1.5.1 Absenteeism 21

1.5.2 Intention to Quit 22

1.5.3 Turnover 23

1.5.3.1 Turnover in Australian call centres 24

1.6 CHAPTER ONE SUMMARY 24

CHAPTER TWO: MODELS OF PSYCHOLOGICAL WELLBEING ...................... 26

2.1 OVERVIEW 26

2.2 DEFINITIONS OF PSYCHOLOGICAL WELLBEING 26

2.2.1. Context-Free Psychological Wellbeing 27

2.2.1.1. Psychological distress 27

2.2.1.2. Life satisfaction 28

2.2.2 Job-Related Psychological Wellbeing 29

2.2.2.1. Job satisfaction 30
2.3 THEORETICAL EXPLANATIONS FOR PSYCHOLOGICAL WELLBEING AT WORK

2.3.1 The Access To Categories Of Experience (ACE) Model .................................................................
2.3.1.1 Work As A Social Institution.................................................................................................
2.3.1.2 Latent functions of work ..................................................................................................
2.3.1.3 Evidence For The ACE Model ..........................................................................................
2.3.1.4 Relative associations of the ACE categories to psychological wellbeing ......................
2.3.1.5 ACE model predictions of psychological wellbeing ..........................................................
2.3.1.6 Criticisms of the ACE model ..........................................................................................
2.3.1.7 Access to Categories of Experience during call centre operations ..................................

2.3.2 The Principal Environmental Influences (PEI) Model ............................................................
2.3.2.1 Evidence For The PEIs ....................................................................................................
2.3.2.2 Environmental Integrity ............................................................................................... 
2.3.2.2.1 Money ..................................................................................................................
2.3.2.2.2 Physical security ..................................................................................................
2.3.2.3 Social Reference .........................................................................................................
2.3.2.3.1 Valued social position ..........................................................................................
2.3.2.3.2 Opportunities for interpersonal contact .................................................................
2.3.2.4 Job Demands ..............................................................................................................
2.3.2.4.1 Externally generated goals ..................................................................................
2.3.2.5 Job Scope ..................................................................................................................
2.3.2.5.1 Environmental clarity ..........................................................................................
2.3.2.5.2 Opportunities for control ....................................................................................
2.3.2.5.3 Opportunities for skill use ..................................................................................
2.3.2.5.4 Variety ................................................................................................................
2.3.2.6 Evidence for Entire PEI Model Predictions of Psychological Wellbeing ..................

2.4 THE PRESENT STUDY

2.4.1 Overview ............................................................................................................................
2.4.2 Aims Of The Present Study .............................................................................................
2.4.3 Hypotheses ....................................................................................................................... 
Hypothesis 1: Call centre operators will report lower levels of psychological wellbeing compared to normative data from other work roles ....................................................... 
Hypothesis 2: The ACE model will be predictive of psychological wellbeing .............................. 
Hypothesis 3: The PEI model will be predictive of psychological wellbeing ................................. 
Hypothesis 4: Compared to ACE, the PEI model will be a better predictor of psychological wellbeing .................................................................................................................. 
Hypothesis 5: Compared to operators who prefer their current schedule, operators reporting a preference to work fewer hours will also report significantly lower job satisfaction ........................................................................................................ 
Hypothesis 6: Operators reporting low job satisfaction will also report lower job commitment 

CHAPTER THREE: METHOD AND PROCEDURE ........................................................................

3.1 DESIGN ..............................................................................................................................
3.2 RESEARCH SETTING ........................................................................................................
3.3 RESPONDENT CHARACTERISTICS ................................................................................
3.3.1 Sample One ....................................................................................................................
3.3.2 Sample Two ....................................................................................................................
3.4 MEASURES
3.4.1 Demographic Characteristics ......................................................... 65
3.4.2 Job Involvement .............................................................................. 65
3.4.3 Psychological Wellbeing ................................................................. 67
  3.4.3.1 Psychological Distress ................................................................. 68
  3.4.3.2 Life Satisfaction ........................................................................ 71
  3.4.3.3 Job Satisfaction .......................................................................... 71
3.4.4 The Access to Categories of Experience (ACE) Model ................. 73
3.4.5 The Principal Environmental Influences (PEI) Model ..................... 74
  3.4.5.1 Money ......................................................................................... 75
  3.4.5.2 Physical Security ......................................................................... 75
  3.4.5.3 Valued Social Position ................................................................. 76
  3.4.5.4 Opportunities for Interpersonal Contact ..................................... 76
  3.4.5.5 Externally Generated Goals ......................................................... 76
  3.4.5.6 Environmental Clarity ................................................................. 77
  3.4.5.7 Opportunities for Control ............................................................ 77
  3.4.5.8 Opportunities for Skill Use ......................................................... 77
  3.4.5.9 Variety ......................................................................................... 77
3.5 PROCEDURE
  3.5.1 Data Collection for Sample One .................................................... 77
  3.5.2 Data Collection for Sample Two .................................................... 79

CHAPTER FOUR: DESCRIPTIVE AND CORRELATION ANALYSES .......... 80
4.1 OVERVIEW
  4.1.1 Data Screening ............................................................................... 80
  4.1.2 Interpretability parameters ............................................................ 81
4.2 DESCRIPTIVE ANALYSES
  4.2.1 Demographic Variables ................................................................. 82
  4.2.2 Job Involvement Variables (sample two only) .............................. 82
    4.2.2.1 Actual Work hours .................................................................. 82
    4.2.2.2 Preferred Work Hours .............................................................. 83
    4.2.2.3 Difference between Actual and Preferred Hours (Diff. Hrs) .... 84
    4.2.2.4 Job Attachment ...................................................................... 84
    4.2.2.5 Job Entrapment ....................................................................... 85
    4.2.2.6 Projected Job Stay ................................................................... 85
    4.2.2.7 Tenure Commitment ............................................................... 85
  4.2.3 Psychological Wellbeing ................................................................. 86
    4.2.3.1 Psychological Distress ............................................................... 86
    4.2.3.2 Life Satisfaction ..................................................................... 87
    4.2.3.3 Job Satisfaction ..................................................................... 87
  4.2.4 The Access to Categories of Experience (ACE) model ................... 88
  4.2.5 The Principle Environmental Influence (PEI) model ....................... 89
    4.2.5.1 Environmental Integrity ......................................................... 90
    4.2.5.2 Social Reference ................................................................. 90
    4.2.5.3 Job Demands ................................................................. 91
    4.2.5.4 Job Scope ......................................................................... 91
4.3 CORRELATION ANALYSES .............................................................. 92
  4.3.1 Demographic Variables ................................................................. 92
4.3.2 Job Involvement Variables (Sample Two only) .................................................. 93
  4.3.2.1 Inter-relationships ...................................................................................... 93
  4.3.2.2 Relationships with Psychological Wellbeing ............................................. 95
4.3.3 Psychological Wellbeing Variables .................................................................... 96
4.3.4 The ACE Model ................................................................................................... 96
  4.3.4.1 Bivariate Inter-relationships ........................................................................ 96
  4.3.4.2 Relationships Between ACE and Psychological Wellbeing Variables ...... 98
    4.3.4.2.1 Psychological distress .......................................................................... 98
    4.3.4.2.2 Life satisfaction.................................................................................... 98
    4.3.4.2.3 Job satisfaction.................................................................................... 99
4.3.5 The PEI Model ..................................................................................................100
  4.3.5.1 Bivariate Inter-relationships .......................................................................100
    4.3.5.1.1 Environmental integrity .................................................................100
    4.3.5.1.2 Social reference................................................................................101
    4.3.5.1.3 Job demands ....................................................................................103
    4.3.5.1.4 Job scope ..........................................................................................103
  4.3.5.2 Bivariate Relationships with Psychological Wellbeing ............................. 104
    4.3.5.2.1 Psychological distress .......................................................................104
    4.3.5.2.2 Life satisfaction................................................................................105
    4.3.5.2.3 Job satisfaction................................................................................106
4.4 SUMMARY OF FINDINGS: DESCRIPTIVE AND CORRELATION ANALYSES 107

CHAPTER FIVE: PREDICTING PSYCHOLOGICAL WELLBEING .................... 110

5.1 OVERVIEW ............................................................................................................ 110
  5.1.1 Multiple Regression Analyses ....................................................................... 110
    5.1.1.1 Multiple Regression Method I ............................................................... 111
    5.1.1.2 Multiple Regression Method II ............................................................. 111
    5.1.1.3 Multiple Regression Method III ........................................................... 111
    5.1.1.4 Cross-validation procedure .................................................................... 112
5.2 THE ACCESS TO CATEGORIES OF EXPERIENCE (ACE) MODEL PREDICTION OF PSYCHOLOGICAL WELLBEING 113
  5.2.1 Multivariate Data Screening ........................................................................ 113
  5.2.2 The ACE Model Prediction of Psychological Distress .................................. 114
  5.2.3 The ACE Model Prediction of Life Satisfaction ............................................ 117
  5.2.4 The ACE Model Prediction of Job Satisfaction ............................................ 119
5.3 THE PRINCIPLE ENVIRONMENTAL INFLUENCE (PEI) MODEL PREDICTION OF PSYCHOLOGICAL WELLBEING 122
  5.3.1 Curvilinear Relationships with Psychological Wellbeing ............................ 122
  5.3.2 Multivariate Data Screening ........................................................................ 123
  5.3.3 The PEI Model Prediction of Psychological Distress .................................... 124
  5.3.4 The PEI Model Prediction of Life Satisfaction .............................................. 127
  5.3.5 The PEI Model Prediction of Job Satisfaction .............................................. 130
  5.3.6 Path Analyses Investigating the PEI Model ................................................... 134
    5.3.6.1 Path analysis of the relationship between Opportunities for Control and psychological distress in sample two ................................................................. 136
    5.3.6.2 Path analysis of the relationship between Opportunities for Control and life satisfaction in sample two ............................................................................. 138
5.3.6.3 Path analysis of the relationship between Opportunities for Control and job satisfaction in sample two

5.4 MODEL COMPARISONS IN THE PREDICTION OF PSYCHOLOGICAL WELLBEING

5.4.1 Consistency of Prediction: Between Samples, Between Models

5.4.2 Strength of Prediction: Between Samples, Between Models

5.4.3 Stability within Reduced Model Predictions: Cross-Validation

5.4.4 Summary of Between-Models Comparison

5.5 CHAPTER FIVE SUMMARY

CHAPTER SIX: DISCUSSION

6.1 OVERVIEW

6.2 THE PSYCHOLOGICAL WELLBEING OF CALL CENTRE OPERATORS

6.3 SITUATIONAL ELEMENTS OF THE CALL CENTRE

6.4 RELATIONSHIPS BETWEEN THE SITUATIONAL ELEMENTS AND PSYCHOLOGICAL WELLBEING

6.5 MODEL PREDICTIONS OF PSYCHOLOGICAL WELLBEING

6.6 THE RELATIONSHIP OF JOB INVOLVEMENT TO JOB SATISFACTION

6.7 CONCLUSION

6.8 METHODOLOGICAL CONCERNS
LIST OF TABLES AND FIGURES

TABLES

Table 2.1: Categories of Experience Representing the Latent Functions of Work ................................................................. 34
Table 2.2: Description of the Principal Environmental Influences .............. 41
Table 4.1: Descriptive Statistics for All Continuous Variables ...................... 83
Table 4.2: Pearson Bivariate Correlations Between All Continuous Variables ................................................................. 94
Table 4.3: Consistent Relationships Between Psychological Wellbeing and Model Variables ..................................................... 109
Table 5.1: Sequential, Simultaneous and Statistical Regression Analyses for the ACE Model Prediction of Psychological Wellbeing ................................. 116
Table 5.2: Sequential, Simultaneous and Statistical Regression Analyses for the PEI Model Prediction of Psychological Wellbeing ................................. 126

FIGURES

Figure 5.1: Cross-Validation of the Reduced Model Predictions of Psychological Wellbeing .................................................. 120
Figure 5.2: Path Analyses of the Relationship Between Opportunities for Control and Psychological Wellbeing .............................................. 137
ABSTRACT

Approximately four thousand call centres employ more than 160,000 people in Australia, yet relatively little attention has been paid to how this type of work influences the wellbeing of those who do it – despite substantially higher absence frequencies and turnover rates relative to other industries. Utilising a survey design, the present study compared two situational elements models in their prediction of context-free and job-related psychological wellbeing in two samples of public sector call centre operators. The replicated findings were that the situational elements relating to the importance of clarity for how to derive social value and meet the expectations of the work environment were most predictive of psychological distress, life and job satisfaction. While the availability of money was also predictive of life satisfaction, situational elements relating to Job Scope were important to the prediction of job satisfaction. The addition of Job Scope variables found that Warr’s (1987) model of Principal Environmental Influences was a stronger predictor of job satisfaction than Jahoda’s (1981) Access to Categories of Experience (ACE) model. Therapeutic recommendations for job re-design required enrichment rather than simplification of call work.