A Contextual Account for Worker Engagement and Burnout

Carolyn May Timms
BA (Ed). B Psych (Hons).

Psychology, School of Arts and Social Sciences

James Cook University

Cairns Campus

Submitted in fulfillment of the requirements of the degree of PhD in Psychology.

(December, 2007)

A Contextual Account for Worker Engagement and Burnout

Carolyn May Timms PhD Thesis

STATEMENT OF A	CCESS
	k, understand that James Cook University will make this iversity Library and, via the Australian Digital Theses
	work, a thesis has significant protection under the ace any further restriction on access to this work.
	10.04.08
Signature	Date
ELECTRONIC COPY OF T	HESIS FOR LIBRARY DEPOSIT

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.

	10.04.08
Signature	Date

STATEMENT OF SOURCES

	~ : /			
DE	GLÆ	ARA	М	ON.

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Information derived from the published or unpublished work of others has been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.

	10.04.08
Signature	Date

DECLARATION ON ETHICS

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the *National Statement on Ethics Conduct in Research Involving Human* (1999), the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice* (1997), the *James Cook University Policy on Experimentation Ethics. Standard Practices and Guidelines* (2001), and the *James Cook University Statement and Guidelines on Research Practice* (2001). The proposed research methodology received clearance from the James Cook University Experimentation Ethics Review Committee (Stage 1 approval number H2205; Stage 2 approval number H2207; Stage 3 approval number H2593).

	10.04.08
Signature	Date

Statement on the contribution of others including financial and editorial help

Declaration of collaboration with and assistance from others

The design of the research reported in this thesis was developed by me in consultation with my supervisor Dr Deborah Graham. All data was collected and analysed by me, however my supervisors Dr Deborah Graham and Dr David Cottrell played an essential advisory role in my data analysis.

I was assisted by the Queensland Independent Education Union who duplicated 1,000 copies of the survey for the teachers' phase in 2006. Participants were selected in a computer generated random draw of union members and received the surveys with accompanying stamped addressed envelopes in a bulk mail out of union documents. Several other organisations, including a large insurance company, provided a link to the online phase of the survey on their websites.

I received a small grant from James Cook University's Graduate Research School to attend a Structural Equation modelling course run by The Australian Consortium for Social and Political Research Incorporated (ACSPRI) in January 2007. This course provided me with additional expertise in data analysis. The university has assisted my work by providing generic thesis writing skills and advanced statistics workshops at various times throughout my candidature.

My two supervisors have been listed as co-authors on some publications arising from this thesis (Chapter 3, and Appendix B). Their contribution to these works was editorial and advisory in nature.

	10.04.08
Carolyn Timms	Date

Abstract

Worker engagement is an emergent area of organisational psychology and is thought to contribute to worker well being as well as organisational productivity. Previous research has demonstrated that worker burnout has more to do with the workplace environment than the characteristics of individual workers. It was therefore extrapolated that the same would apply to worker engagement. The current research sought to expand previous findings and tease out some commonalities in respondent experiences of engagement and burnout in the workplace.

The workplace context for respondent experience was defined by the Areas of Worklife Survey (AWS) which includes the areas of workload, control, reward, community, fairness and values. It was thought that matches or mismatches on the AWS would provide a sense of respondents' understandings of their psychological contract. Further information about the workplace was provided by responses in regard to the factors of management trustworthiness and procedural justice. A model of projected relationships of the variables predicted that favourable responses on those variables describing work context would be predictive of worker engagement, as defined by the Utrecht Work Engagement Scale (UWES) and unfavourable responses would predict worker burnout, as defined by the Oldenburg Burnout Inventory (OLBI). It was also predicted that management trustworthiness, procedural justice and fairness (AWS) measures would demonstrate a great deal of overlap.

The research plan involved three stages. Firstly, as most previous research had been conducted within larger organisational settings, small group interviews were conducted for people working within small and micro business settings. The second stage of the research included two phases of the same workplace survey, a pen and paper edition that surveyed teachers working in independent schools; and an online version that surveyed people representing 28 different occupational groups. Telephone interviews with 20 respondents to the survey comprised the third stage of the research.

Data analysis found that the interviews from small and micro business fitted AWS parameters well, with participants indicating that their businesses operated within very fine lines in terms of economics and staffing, yet they were rewarded in terms of control, community, and a sense of achievement. The inclusion of small and micro business categories within the subsequent survey instrument found that there were no significant differences between categories of business in regard to any of the study variables.

Statistical analyses of the data included a K-means cluster analysis of a subgroup of the combined survey respondents. This identified five groups of survey respondents based on their levels of response to burnout and engagement. The groups were: The Empowered Group; the Under Pressure Group; The Unengaged Group; The Burnout Experience 1 Group and The Severe Burnout Group. As well as demonstrating distinctive profiles in regard to the burnout and engagement measures, subsequent analyses involving the workplace context variables provided support for the research

model. A three factor confirmatory analysis of the management trustworthiness, procedural justice and fairness (AWS) variables that confirmed these measures covered considerable common ground.

In addition, path analyses found that the AWS variables worked as predictors for engagement and burnout for three of the cluster groups, but other factors must be sought for an explanation of engagement in The Under Pressure Group and the Unengaged Group. In addition, The Unengaged Group, members of which reported ambivalence on the UWES and were not experiencing burnout, was found to consist of two subgroups: one of which reported matches on the AWS variables and the other reported mismatches. Data from participant interviews were also organised within the cluster groups. These supported the previous findings within this research and provided a great deal of insight into particular patterns of participant response, leading to refinement of the research model.

The current research found that AWS variables are important predictors of burnout and engagement and emphasises the substantial role played by management in promoting employee well being. The original contribution made by this research lay in the definition and detailed description of a middle group which represented 30% of respondents. Some of these people reported experiencing disillusionment with their chosen career paths. Others of this group were experiencing some discomfort within their work environments that had not translated into a burnout experience for them. This would indicate that further research might investigate the experiences of those that fall between the two extremes of burnout and engagement in order to better differentiate these variables in the interest of providing organisations with skills for promoting the engagement of employees.

Table of Contents

STATEMENT OF ACCESS	ii
STATEMENT OF SOURCES	iii
DECLARATION	ii
Abstract	V
Table of Contents	vi
List of Figures	xii
List of Tables	XV
Acknowledgements	xvi
Chapter 1	19
Literature Review	19
Section 1: Job Burnout and Engagement	19
1.1 Stress and Burnout in the Workplace	19
1.2 The Burnout Syndrome	20
1.2.1 Emotional Exhaustion	21
1.2.2 Cynicism and Disengagement	22
1.2.3 Inefficacy or Lack of Personal Accomplishment	23
1.3 Determining the Presence of Burnout	24
1.3.1 Burnout as a Robust Construct	24
1.3.2 Responses to Burnout: Individual or Organisational?	25
1.3.3 Is there a Predictable Pattern in the Development of Burnout?	26
1.4 Work Engagement	27
1.5 Burnout and Engagement: Opposite ends of one construct or negatively correlate	d?. 29
Section 2. Psycho-social contexts in the development of burnout and engagement:	30
1.6 Theoretical perspectives.	30
1.6.1 The Job Demand-Control model	30
1.6.2 The Effort- Reward imbalance model	31
1.6.3 The Job Demand-Resources model	32
1.6.4 The Six Areas of worklife model.	34
1.7 Burnout and Engagement develops in an Organisational Context	53
Section 3: Fairness, Procedural Justice, Trust, Management Trustworthiness: Overview	v,
Scope, Research Aim and Hypotheses	54
1.8 Trust and the Psychological Contract	54
1.9 Perceptions of Management Trustworthiness	56

1.9.1 Ability	
1.9.2 Benevolence	50
1.9.3 Integrity	5
1.10 Trust and Mistrust	5
1.11 Organisational Commitment	5
1.12 Fairness and Procedural Justice	5
1.13 Procedural Justice and Management Trustworthiness	6
1.13.1 How Workers respond to Unjust Treatment in the Workplace	6
1.14 How Procedural Justice and Management Trustworthiness research can i	inform
Managements	6
1.14.1 Scope of the Current Research	6
1.14.2 Research Design	6
1.15 Model of Proposed Variable Relationships in the current research	6
1.16 Aim of the Research	7
1.17 Hypotheses	7
Chapter 2	7
"I'm hopeful that the phone will keep ringing and keep me out of mischief": Reg	gional Small
Business 'On the Edge'	7
2.1.1 Aim	7
2.2 Methodology	7
2.2.1 Participants:	7
2.2.2 Procedure	7
2.3 Analysis and Results	8
2.4 Data presentation and relevant literature	8
2.4.1 Theme 1. A sense that the business is, "on the edge"	8
2.4.2 Theme 2. A sense that running one's own business can provide satisfa	action and
that it is personally rewarding.	8
2.5 Theme 3. Manifestations of burnout	9
2.6 Conclusion.	
Chapter 3	9
'I just want to teach'. Queensland independent school teachers and their workload	
3.1 Method	9
	9 ad9
3.1.1 Participants	9'ad9'
	9 ad9 10

5.1.4 Aim and hypothesis of the current study	169
5.2 Method	170
5.2.1 Participants	170
5.2.2 Materials	170
5.2.3 Procedure	172
5.3 Results	175
5.3.1 Missing Values Analyses	175
5.3.2 One factor Congeneric Tests of Constructs	176
5.4 Discussion	194
Chapter 6	199
Factor analyses, Recalculation of Variables and K-means Cluster Analysis revisited	199
6.1 Introduction	199
6.1.1 Combined Justice and Management Trustworthiness measure (CJMT)	203
6.1.2 Exploratory Factor Analyses	203
6.2 Cluster analysis revisited	212
6.2.1 Points of Comparison between the two K-means Cluster Analyses in the	Current
Research Project	218
Chapter 7	219
Path Analyses and Hours of work	219
7.1 The combined data set (n=515)	220
7.2 Groups identified in the New Cluster Analysis	222
7.2.1 The Empowered Group (NC1, $n = 73$)	223
7.2.2 The Under Pressure Group (NC2, $n = 110$)	225
7.2.3 The Unengaged Group (NC3, <i>n</i> = 158)	227
7.2.4 The Burnout Experience 1 Group (NC4, $n = 95$)	234
7.2.5 The Severe Burnout Group (NC5, n = 79).	236
7.3 Comparison of path analyses in the new clusters	238
7.4 Hours of work per week and the new cluster groups.	244
7.5 Discussion of findings in Chapters 6 and 7	246
7.5.1 Role Conflict	247
7.5.2 The Unengaged Group	249
7.5.3 Interaction of the areas of worklife within the new cluster groups	250
7.5.4 Workload and absorption	250
7.5.5 Engagement	250
7.5.6 Fairness and CJMT	251

7.5.7 The CJMT variable	252
7.5.8 Limitations and Recommendations for future research	253
Chapter 8	257
Respondent interviews	257
8.1 The Interview Stage of the Research Project	257
8.1.1 The Empowered Group	258
8.1.2 Discussion of insights from The Empowered Group interviews	265
8.2 The Under Pressure Group	267
8.2.1 Discussion of insights from The Under Pressure Group interviews	279
8.3 The Unengaged Group	284
8.3.1 The Unengaged Match subgroup	284
8.3.2 The Unengaged Mismatch subgroup	293
8.4 The Burnout Experience 1 Group (NC4)	307
8.4.1 Discussion of insights from The Burnout Experience 1 Group interviews	317
8.5 The Severe Burnout Group	320
8.5.1 Discussion of insights from The Severe Burnout Group interviews	333
8.6 Summary of Interview Data	337
8.6.1 The use of the K-means Cluster Analysis Categories to Organize Qualitative	e Data
	337
8.6.2 The Middle Group	338
8.6.3 Work Engagement	339
8.6.4 Work Burnout	341
8.6.5 Conclusion	342
Chapter 9	345
Conclusions	345
9.1 Overview.	345
9.1.1 Chapter One	345
9.1.2 Chapter Two	346
9.1.3 Chapter Three	346
9.1.4 Chapter Four	347
9.1.5 Chapter Five	348
9.1.6 Chapters Six and Seven.	349
9.1.7 Chapter Eight	350
9.2 The research model and hypotheses	350
9.2.1 The Psychological Contract	353

9.2.2 Trust and Communication	355
9.2.3 Other Research Hypotheses	5
9.2.4 Limitations of the current research	,
9.2.5 Implications of the current research	}
9.2.6 Recommendation for Future Research)
References	L
Appendix A: Survey Instrument (key)	3
Appendix B: 'I'm just a cog in the wheel'	2
Appendix C: Maximum Likelihood Factor Analyses of AWS, OLBI and UWES items 388	3
Appendix D: Path Analyses - Tables	,
Appendix F: Respondents' expectations of their work	j

List of Figures

Figure 1.1. Model of Variables and their Relationship to Employee Engagement and Burnout	69	
Figure 3.1. Hours worked by respondents (permanent full time and 'on contract', (n = 251) using QDIR report (2003) categories	113	
Figure 4.1. Cluster Distribution of Standardized Engagement (UWES) and Burnout (OLBI) Variables	144	
Figure 4.2. Distribution of Standardized Management Trustworthiness, Trust and Workplace Justice Measures within Cluster Groups	147	
Figure 4.3. Distribution of Standardized AWS Variables within Cluster Groups	149	
Figure 5.1. One factor congeneric model for fairness, teachers' data (n=255) and online data (n=260)	178	
Figure 5.2. One Factor Congeneric Model for Procedural Justice, Teachers' Data (n=255) and Online Data (n=260)	181	
Figure 5.3. Scree plots for teachers' data (left) and online data (right) for Management Trustworthiness items	184	
Figure 5.4. One Factor Congeneric Model for Management Trustworthiness, Teachers' Data (n=255) and Online Data (n=260)	187	
Figure 5.5. One Factor Congeneric Model, Trust in Management, Teachers' Data (n= 255) and Online Data (n=260)	188	
Figure 5.6. Three factor model, teachers' data sets (n=255) and online data set (n=260)	191	
Figure 5.7. Final one factor congeneric models for combined management trustworthiness, procedural justice and fairness (AWS) variables.	194	
Figure 6.1. Projected relationship of AWS to OLBI and UWES variables, extrapolated from Leiter and Maslach (2004)	202	
Figure 6.2. Original cluster profiles (a) compared visually to the new profiles (b) developed after recalibration of UWES and OLBI variables	215	
Figure 6.3. Distribution of the AWS variables within the original (a) and new (b) clusters (N.B. the CJMT variable also appears in the new cluster diagram)	217	
Figure 7.1. Path Analysis of combined data (n=515)	222	
Figure 7.2. Path Analysis of The Empowered Group (NC1)	224	
Figure 7.3. Path Analysis for The Under Pressure Group (NC2)	226	
Figure 7.4. Path Analysis of The Unengaged Match subgroup (NC3a)	230	
Figure 7.5. Path Analysis of The Unengaged Mismatch subgroup (NC3b)	233	
Figure 7.6. Path Analysis, The Burnout Experience 1 Group (NC4)	235	
Figure 7.7. Path Analysis for The Severe Burnout Group (NC5)	237	
Figure 7.8. Established patterns of relationships between AWS variables in Path Analyses	243	

Figure 8.1. Kate's scores on OLBI and UWES (left), AWS and CJMT (right) variables	259	
Figure 8.2. Maggie's scores on OLBI and UWES (left), AWS and CJMT (right) variables.		
Figure 8.3. Ed's scores on OLBI and UWES (left), AWS and CJMT (right) variables.	261	
Figure 8.4. Susan's scores on OLBI and UWES (left), AWS and CJMT (right) variables	267	
Figure 8.5. Alex's scores on OLBI and UWES (left), AWS and CJMT (right) variables.	272	
Figure 8.6. Nick's scores on OLBI and UWES (left), AWS and CJMT (right) variables	275	
Figure 8.7. Philippa's scores on OLBI and UWES (left), AWS and CJMT (right) variables	278	
Figure 8.8. Gemma's scores on OLBI and UWES (left), AWS and CJMT (right) variables	285	
	287	
Figure 8.9. Roger's scores on OLBI and UWES (left), AWS and CJMT (right) variables	293	
Figure 8.10. Amanda's scores on OLBI and UWES (left), AWS and CJMT (right) variables	296	
	298	
Figure 8.12. Alan's scores on OLBI and UWES (left), AWS and CJMT (right) variables	300	
Figure 8.13. Robert's scores on OLBI and UWES (left), AWS and CJMT (right) variables	308	
Figure 8.14. Alice's scores on OLBI and UWES (left), AWS and CJMT (right) variables	310	
Figure 8.15. Julie's scores on OLBI and UWES (left), AWS and CJMT (right) variables	314	
Figure 8.16. Rose's scores on OLBI and UWES (left), AWS and CJMT (right) variables	321	
Figure 8.17. Sarah's scores on OLBI and UWES (left), AWS and CJMT (right) variables		
Figure 8.18. Amy's scores on OLBI and UWES (left), AWS and CJMT (right) variables	325	
Figure 8.19. Eva's scores on OLBI and UWES (left), AWS and CJMT (right) variables	327	
Figure 8.20. Samantha's scores on OLBI and UWES (left), AWS and CJMT (right)	330	
variables	332 351	
1 1000 0 5 11 12 12 12 12 12 12 12 12 12 12 12 12	221	

List of Tables

Table 2.1. Words used in card sort for small group interviews	79
Table 3.1. Employment status of participants by School.	106
Table 3.2. Measures used in the survey instrument	107
Table 3.3. Means, SD, and alphas of survey variables compared to previously normed data	109
Table 3.4. Significant differences between Primary and High School teachers on Dedication and Absorption	110
Table 3.5. Pearson's correlations indicating relationships between main study variables	111
Table 3.6. Work roles played by permanent full time and contract respondents (n=251) within their schools.	113
Table 4.1. Measures used in Survey	139
Table 4.2. Correlation Table of Main Study Variables	141
Table 4.3. Variable Means at Final Cluster Centres	143
Table 4.4. Euclidean Distances between Final Cluster Centres	144
Table 4.5. Means and SDs for Management Trustworthiness, Trust and Procedural Justice in Cluster Groups (z scores)	146
Table 4.6. Means and SDs for AWS variables (z scores)	148
Table 5.1. Cronbach's alphas of Justice and Management Trustworthiness Variables as Originally Reported and in the Two Phases of the Current Study	172
Table 5.2. Correlations between Fairness (AWS), Procedural Justice Measures and Management Trustworthiness Measures.	173
Table 5.3. Procedural Justice Items and Modifications made to achieve Fit with the Calibration Sample (teachers) data (n=255)	179
Table 5.4. Pattern matrices showing factor loadings from the two data sets	182
Table 5.5. Structure matrices for teachers and online data, demonstrating item and factor correlations.	183
Table 5.6. Management Trustworthiness Items and Modifications made to achieve Fit with the Data, Calibration sample (teachers) data (n=255)	186
Table 5.7. Comparison of factor score weights between teachers and online datasets in regard to the trust for management scale.	189
Table 5.8. Confirmatory Factor Analysis Items and Modifications made to achieve Fit with the Calibration sample (teachers) data (n=255)	190
Table 5.9. Progress of One Factor Congeneric Model for Combined Variables, Calibration sample (teachers) data (n=255)	192
Table 6.1. Combined Justice and Management Trustworthiness (CJMT) items	203
Table 6.2 Individual items in each of the AWS OLBI and UWES variables	206

Table 6.3. Individual items Composite Justice Management Trustworthiness (CJMT)
Table 6.4. Descriptive statistics weighted variables (n=515)
Table 6.5. Tests for invariance between the two phases of the research on study variables
Table 6.6. Euclidean distances between final new cluster centres.
Table 6.7. Standardised scores at cluster centres
Table 6.8. Comparison of cluster memberships
Table 6.9. Means and SD of AWS and CJMT variables in Cluster Groups (z scores)
Table 7.1. Demographic information about groups identified in the second cluster analysis
Table 7.2. z scores at cluster centres for the two subgroups within The Unengaged Group
Table 7.3. Variable R ² values in the various clusters and combined group model
Table 7.4. Comparisons of pathways and probabilities in the different clusters
Table 7.5. Regression analyses of AWS predictor and mediator variables on values as per Baron and Kenny (1986)
Table 7.6. Cluster groups and hours of work per week based on QDIR (2003) report categories

Acknowledgements

My PhD candidature was well beyond 'the bend in the road' when, as a High School history and geography teacher, I began to study psychology by distance education through Monash University simply because I wanted to learn something new. From those early years my husband Jim has been there, initially humouring me and explaining to me 'what the hell a standard deviation is and why the hell it is important'. Later he whole-heartedly encouraged me to continue in what has become, apart from raising my two children, the most absorbing project in my life. I have many people to thank for their assistance and encouragement on my journey. These include my family and friends who were somewhat bewildered as to what could possibly motivate a middle aged woman to forsake secure employment and undertake PhD candidature, but who nevertheless provided considerable encouragement and support. I must especially acknowledge Traylea and Tim, my precious kids and (now that they are adults) my best friends, who have been phenomenal 'cheerleaders' with heartwarming pride in their mum's achievements.

My last few years as a teacher provided an invaluable encounter with workplace breakdown that happened to coincide with my undergraduate study of organisational psychology and became the inspiration for my choice of subject. While this experience was extremely uncomfortable, it was a time of powerful learning and revelation. My extraordinary luck, after the decision to transfer to James Cook University and embark on the uncertainties that are associated with honours and then PhD, was to score Dr Deborah Graham as my supervisor. I came to her with an idea for my research and she was unreservedly enthusiastic. Deborah has continued to impart support, oomph and academic rigour throughout my candidature, making it a very happy and fulfilling experience.

I am also indebted to Dr Marie Caltabiano, my second honours supervisor and to Dr David Cottrell, my second supervisor during my PhD candidature. Marie urged me to submit a poster of my honours research to the Industrial and Organisational Psychology conference in 2005, which eventually led to chapter seven in the book 'Advances in Organisational Psychology' in 2007. David's crystal clear thinking and

somewhat 'direct' red ink comments have alerted me to 'wobbles' in my written communication. While the comments were not always welcome, they were always appropriate, well spotted, to my benefit, and therefore much appreciated. In addition, participants in all stages of this project generously shared their insights and willingly provided me with a snapshot of their experiences in their workplaces; without them the project would not have been possible.

One very constructive aspect of my candidature has been the opportunity for parttime work as a Senior Research Officer with Professors Neil Anderson and Colin
Lankshear on the 'Girls and ICT' Australian Research Council project through the
School of Education at JCU. This has enabled me to hone my research and writing
skills within a different context. Concurrent work on another project was at times
chaotic as my poor brain coped with analyses of two different data sets. It was, at
times, extremely difficult to switch concentration to my own project when work
hours ended. But the experience confirmed my love of research and academic writing
and I can only thank Neil and Colin for providing me with a superlative opportunity
and for their belief in me.

Other 'companions on my journey' have been my fellow students, Jane and Denise. I have enjoyed their company, support and endurance, and the 'wacky' moments we have had. Indeed, it is almost a shame finally to hand 'this thing in' as I confront yet another bend in the road.