The Effects of Managers on Employees' Learning in Selected New Zealand Small Manufacturing Firms

A thesis presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

in

Management

at Massey University, Wellington, New Zealand

Alan John Coetzer

2005
ABSTRACT

The view that there should be increased emphasis on learning in workplaces because of rapid changes in business environments, and the suggestion that managers should foster the learning of employees, is prevalent in the workplace learning, organisational learning and 'learning organisation' literature. In New Zealand, and in other developed economies, small firms represent a very significant part of the workplace-learning context. Given the vast knowledge and skills base vested in small firms, how knowledge and skills are developed and maintained through learning processes in these firms are matters of major interest.

Overall, this study seeks to answer the question: In selected small manufacturing firms, what effects, if any, do managers have on employees' learning? To help answer this question, data were collected through semi-structured interviews and mail survey questionnaires. Verbatim expressions of the interview participants were analysed using content analytic procedures. Data gathered from employees through mail survey questionnaires were analysed using a range of statistical methods.

Findings of the content analysis of the verbatim expressions of the interview participants reveal that managers use a variety of strategies to foster learning at and through work in the small firms studied. Analysis of the mail survey data provides a description of how employees in the sample firms perceive their workplaces as learning environments. Employees' attributions of their work-related learning to various sources and methods of learning are also described. Additionally, specific managerial actions and behaviours that have potential to increase employee satisfaction with workplace learning are identified.

Findings of this study contribute to knowledge in the fields of management and human resource management in the small firm context. Synthesis of the qualitative and quantitative findings suggest a conceptual framework that can be used for analysing the effects of managers on employees' learning and help to evaluate the current state of research in the fields.
ACKNOWLEDGEMENTS

I thank my wife Margi, and my sons Rudiger and Wade, for their forbearance and constant support. I also owe a debt of gratitude to my parents and other members of my family for inspiring and supporting me on a mission of learning and sharing knowledge.

Massey University deserves my acknowledgement and thanks for providing financial support, through the Advanced Degree Awards, to allow temporary release time from my duties. It is impossible to name all of the academic and general staff at the Wellington campus of Massey University who gave me support and encouragement in this research. Within the Department of Management and Enterprise Development, numerous colleagues provided constructive feedback on my work. Also, several members of the general staff provided valuable administrative assistance.

My Head of Department, Associate Professor Andrea McIlroy, cleared numerous obstacles in my path and has been one of my most enthusiastic cheerleaders. Andrea is a true learning champion! Many other people, including Ravi Balasubramanian, Deb Wallace, Craig Godley and Raja Peter also made special contributions. Ravi acted as a ‘sounding board’ throughout the research. Deb provided excellent administrative assistance during survey implementation. Craig helped set up an effective and efficient data entry system. Raja provided valuable guidance on aspects of the statistical analysis.

This study would not have been possible without the support that I received from the owner-managers and employees that participated in this study. Thank you all for finding the time in your busy schedules to share your experiences with me during my data collection trips.

Lastly, but certainly not least in any way, my research supervisors, Associate Professors Claire Massey and Frank Sligo, deserve my special thanks. I have been fortunate to have such highly competent research supervisors. Their insightful critique has benefited my work immeasurably. Throughout the process they have been extremely patient and encouraging. I thank each of them very much.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. i

ACKNOWLEDGEMENTS ............................................................................................... ii

LIST OF TABLES ............................................................................................................. ix

LIST OF FIGURES .......................................................................................................... xi

CHAPTER ONE: INTRODUCTION TO THE STUDY ......................................................... 1

1.1 BACKGROUND TO THE RESEARCH PROBLEM 1

1.2 GENERAL RESEARCH PROBLEM AND ITS SIGNIFICANCE 5
  1.2.1 General Research Problem 6
  1.2.2 Significance of the General Research Problem 7

1.3 RESEARCH QUESTION AND OBJECTIVES 10

1.4 FRAMEWORK GUIDING THE STUDY 13

1.5 ORGANISATION OF THE DISSERTATION 14

CHAPTER TWO: REVIEW OF THE LITERATURE ................................................................ 16

2.1 WORKPLACE LEARNING 17
  2.1.1 Workplaces as Sites for Learning 17
  2.1.2 Conceptions of Learning 19
  2.1.3 Levels and Types of Learning 21
  2.1.4 Formal and Informal Learning 22
  2.1.5 Significance of Informal Learning 25
  2.1.6 Summary of Workplace Learning 30
2.2 EVALUATION OF WORK-RELATED LEARNING
   2.2.1 Meaning and Purposes of Evaluation
   2.2.2 Four-level Framework
   2.2.3 Criticisms of the Four-level Framework
   2.2.4 Summary of Evaluation of Work-related Learning

2.3 THE SMALL FIRM CONTEXT
   2.3.1 Defining the Small Firm
   2.3.2 Employee Development in Small Firms
   2.3.3 Barriers to Formal Training in Small Firms
   2.3.4 Shift of Focus from ‘Training’ to ‘Learning’
   2.3.5 Summary of the Small Firm Context

2.4 THE MANAGER AS LEARNING FACILITATOR
   2.4.1 Manager’s Responsibility for Employee Development
   2.4.2 Types of Developmental Interventions
   2.4.3 Distinguishing Among the Developmental Interventions
   2.4.4 Effects of Managers on Work Environments
   2.4.5 Management in Small Firms
   2.4.6 Summary of the Manager as Learning Facilitator

2.5 RATIONALE FOR THE INVESTIGATION

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 RESEARCHING EMPLOYEE DEVELOPMENT IN SMALL FIRMS:
   PREVIOUS APPROACHES

3.2 DESCRIPTION AND JUSTIFICATION OF THE
   RESEARCH DESIGN
   3.2.1 Basic Types of Research Designs
   3.2.2 Elements of Research Designs
   3.2.3 Design of the Current Study
   3.2.4 Classification of the Current Study
3.3 METHODS USED IN THE QUALITATIVE STUDY 106
  3.3.1 Rationale for the Choice of Methods 106
  3.3.2 Sampling Method and Pre-Interview Procedures 107
  3.3.3 Interview Procedures 109
  3.3.4 Analysis of the Interview Data 110
3.4 METHODS USED IN THE QUANTITATIVE STUDY 113
  3.4.1 Rationale for the Choice of Methods 113
  3.4.2 Questionnaire Design 114
  3.4.3 Theoretical and Empirical Rationale for the Items 116
  3.4.4 Pre-testing the Questionnaire 120
  3.4.5 Sampling Procedure and Securing Participation 121
  3.4.6 Survey Implementation Processes 124
  3.4.7 Analysis of the Survey Data 125
3.5 STRATEGIES FOR DEALING WITH ETHICAL ISSUES 126
  3.5.1 Access to Participants and Informed Consent 126
  3.5.2 Confidentiality and Anonymity 127
  3.5.3 Promises and Reciprocity 127
3.6 SUMMARY 127

CHAPTER FOUR: HOW MANAGERS FOSTER EMPLOYEES’ LEARNINGumble...

4.1 WORK ENVIRONMENT CONDITIONS 130
  4.1.1 Organisational Environment 130
  4.1.2 Social Environment 139
  4.1.3 Physical Environment 145
4.2 DEVELOPMENTAL INTERVENTIONS 146
  4.2.1 On-the-Job Training and Coaching 146
  4.2.2 Mentoring 148
  4.2.3 Delegation 148
  4.2.4 Performance Appraisal 149
4.3 SUMMARY 151
CHAPTER FIVE: EMPLOYEE PERCEPTIONS OF THEIR WORKPLACES AS LEARNING ENVIRONMENTS..........................154

5.1 DEMOGRAPHIC PROFILE OF THE RESPONDENTS 155
5.2 WORK ENVIRONMENT CHARACTERISTICS 158
5.3 SUPERVISORS’ PROXIMATE SUPPORT FOR LEARNING 163
5.4 LEARNING OUTCOMES FOR INDIVIDUALS 166
5.5 LEARNING OUTCOMES FOR ORGANISATIONS 171
5.6 SOURCES AND METHODS OF LEARNING 173
5.7 WHICH VARIABLES ARE ASSOCIATED WITH EMPLOYEE SATISFACTION AND SELF-RATED COMPETENCY? 178
  5.7.1 Factor Analysis 179
  5.7.2 Reliability Analysis 185
  5.7.3 Correlation Analysis 186
  5.7.4 Multiple Regression Analysis 194
5.8 SUMMARY 201

CHAPTER SIX: DISCUSSION OF THE EMPLOYEE SURVEY RESULTS.............202

6.1 AGGREGATE RESULTS 202
  6.1.1 Conditions in the Work Environments 203
  6.1.2 Supervisors’ Proximate Support for Learning 205
  6.1.3 Outcomes of Employee Learning Experiences 206
  6.1.4 Sources and Methods of Learning 207
6.2 RESULTS BY DEMOGRAPHIC VARIABLES 209
   6.2.1 Gender 209
   6.2.2 Ethnicity 210
   6.2.3 Tenure 211
   6.2.4 Nature of Work 212
   6.2.5 Education 213
   6.2.6 Age 214

6.3 RESULTS OF THE CORRELATION AND REGRESSION ANALYSIS 215

CHAPTER SEVEN: CONCLUSIONS AND IMPLICATIONS 219

7.1 CONCLUSIONS RELATING TO RESEARCH OBJECTIVES AND QUESTIONS 221
   7.1.1 Sources and Methods of Learning 222
   7.1.2 Work Environment Characteristics and Developmental Interventions 225
   7.1.3 Outcomes of Learning 228

7.2 IMPLICATIONS 230
   7.2.1 Implications for Management Practice 231
   7.2.2 Implications for Policy Development 236
   7.2.3 Implications for Small Business Literature and Theory Development 237
   7.2.4 Overview of the Theoretical and Practical Contributions of the Thesis 242
   7.2.5 Limitations of the Study: Implications for Policy and Future Research 245
   7.2.6 Implications of the Study’s Focus and Findings for Future Research 247
REFERENCES ........................................................................................................................................ 250

APPENDICES ................................................................................................................................ 285

Appendix A  Sample Letter Inviting Owner/Manager and Employee to Participate in Interviews 285
Appendix B  Information Sheet and Sample Interview Questions 287
Appendix C  Interview Guide and Questions 291
Appendix D  Consent Form 295
Appendix E  Sample Pre-Notice Letter 297
Appendix F  Mail Survey Information Sheet 299
Appendix G  Mail Survey Questionnaire 301
Appendix H  Firms that Participated in the Mail Survey and Response Rates 306
Appendix I  Graphical Plots of Residuals 308
# LIST OF TABLES

Table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Table Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Differences between training, coaching and mentoring</td>
<td>72</td>
</tr>
<tr>
<td>2.2</td>
<td>Differences between delegation and performance appraisal</td>
<td>74</td>
</tr>
<tr>
<td>2.3</td>
<td>Traditional management functions in the small firm context: Potential effects on workplace learning</td>
<td>85</td>
</tr>
<tr>
<td>3.1</td>
<td>Definitions of research design concepts</td>
<td>94</td>
</tr>
<tr>
<td>3.2</td>
<td>Relationship between research objectives and specific research questions</td>
<td>99</td>
</tr>
<tr>
<td>3.3</td>
<td>Classification of the current study</td>
<td>105</td>
</tr>
<tr>
<td>3.4</td>
<td>Sampling parameters and choices</td>
<td>108</td>
</tr>
<tr>
<td>3.5</td>
<td>Organising framework categories and definitions</td>
<td>111</td>
</tr>
<tr>
<td>4.1</td>
<td>Organisations and interview participants</td>
<td>129</td>
</tr>
<tr>
<td>4.2</td>
<td>Summary of findings related to the work environment</td>
<td>151</td>
</tr>
<tr>
<td>5.1</td>
<td>Profile of respondents</td>
<td>156</td>
</tr>
<tr>
<td>5.2</td>
<td>Descriptive statistics: Work environment variables</td>
<td>159</td>
</tr>
<tr>
<td>5.3</td>
<td>Means on work environment variables for demographic groups</td>
<td>161</td>
</tr>
<tr>
<td>5.4</td>
<td>Descriptive statistics: Supervisors’ support for learning variables</td>
<td>163</td>
</tr>
<tr>
<td>5.5</td>
<td>Means on supervisors’ support for learning variables for demographic groups</td>
<td>165</td>
</tr>
<tr>
<td>5.6</td>
<td>Descriptive statistics: ‘Learning outcomes for the individual’ variables</td>
<td>167</td>
</tr>
<tr>
<td>5.7</td>
<td>Means on ‘learning outcomes for the individual’ variables for demographic groups</td>
<td>169</td>
</tr>
<tr>
<td>5.8</td>
<td>Descriptive statistics: ‘Learning outcomes for the organisation’ variables</td>
<td>171</td>
</tr>
<tr>
<td>5.9</td>
<td>Descriptive statistics: ‘Aids to learning’ variables</td>
<td>173</td>
</tr>
<tr>
<td>5.10</td>
<td>Means on ‘aids to learning’ variables for demographic groups</td>
<td>175</td>
</tr>
<tr>
<td>5.11</td>
<td>Percentage of variation in original data explained by each factor</td>
<td>182</td>
</tr>
<tr>
<td>5.12</td>
<td>Rotated factor matrix</td>
<td>183</td>
</tr>
</tbody>
</table>
### Table:

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.13</td>
<td>Results of the reliability analysis</td>
<td>186</td>
</tr>
<tr>
<td>5.14</td>
<td>Correlation matrix for composite variables</td>
<td>188</td>
</tr>
<tr>
<td>5.15</td>
<td>Correlation matrix for work environment, self-rated competency, and satisfaction with learning variables</td>
<td>190</td>
</tr>
<tr>
<td>5.16</td>
<td>Correlation matrix for supervisors' support for learning, self-rated competency, and satisfaction with learning variables</td>
<td>192</td>
</tr>
<tr>
<td>5.17</td>
<td>Regression statistics: Composite variables</td>
<td>195</td>
</tr>
<tr>
<td>5.18</td>
<td>Satisfaction regression models</td>
<td>196</td>
</tr>
<tr>
<td>5.19</td>
<td>Regression statistics: Individual variables</td>
<td>198</td>
</tr>
<tr>
<td>7.1</td>
<td>Research objectives and related research questions</td>
<td>221</td>
</tr>
<tr>
<td>H1</td>
<td>Firms that participated in the mail survey and response rates</td>
<td>307</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure:

1.1 Framework guiding the study 13

3.1 Research conceptual framework 101

4.1 Framework guiding presentation of the findings 128

7.1 Research conceptual framework 219
7.2 Conceptual framework for analysing effects of managers 239

11 Graphical plots of residuals: Composite variables/satisfaction 309
12 Graphical plots of residuals: ‘Learning opportunities’ variables/satisfaction 310
13 Graphical plots of residuals: ‘Support for learning’ variables/satisfaction 311
14 Graphical plots of residuals: ‘Supervisor support for learning’ variables/satisfaction 312
15 Graphical plots of residuals: ‘Sources of learning’ variables/satisfaction 313