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.
Understanding the predictors of participation and the barriers to employee involvement in workplace health promotion programmes

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

DOCTOR OF PHILOSOPHY

in Management

Massey University Albany
Auckland, New Zealand

Joanna Edwards

2012
ABSTRACT

The benefits of workplace health promotion programmes for organisations are well documented. However, the problem of low employee participation has continued to challenge managers, and is an area that has received relatively little attention in health promotion literature, particularly in New Zealand. The purpose of this investigation is to develop a better understanding of the variables predicting, and the barriers preventing, employee participation in health promotion activities. Thereby assisting managers to maximise participation rates and develop successful workplace health promotion initiatives.

This research centred on identifying and assessing the predictors and barriers to employee participation in nine health promotion activities commonly offered in New Zealand organisations. The data collection process included an initial preliminary study, followed by a large online questionnaire completed by 883 New Zealand employees. These results led to developing an in–depth qualitative study, involving semi–structured face–to–face interviews with 20 employees, designed to triangulate and add further depth in understanding the factors that influence employee participation in health promotion programmes.

Research results determined that the likelihood of an employee participating is best predicted by their age, gender, perceived stress, job satisfaction, supervisor support, organisational health climate, and degree of perceived job flexibility. Conversely, the barriers preventing participation included activities scheduled at inconvenient times, a lack of information about the activities, excessive work and family commitments, low job flexibility, low self–efficacy, feeling embarrassed, and a lack of trust in supervisors. Maintaining participation was achieved through continuously changing activities, and constant communication with participating staff.

To maximise participation, the present investigation recommends that managers consider the organisation’s environment, by way of managerial support and cultivating a positive organisational health climate, schedule activities during normal working hours and provide time off for employees to take part, allow greater job flexibility, fully subsidise any financial costs, and ensure all employee health information is secure. When attrition is present, managers would benefit from focusing on motivational strategies, introduce rewards and incentives, and demonstrate their own high motivation, commitment and enthusiasm to the programme.
Completing a doctorate cannot be achieved without the contribution, guidance, and continuous encouragement from a small army of supporters. My journey has been no exception.

I have been extremely fortunate in my choice of supervisors. My sincere gratitude must go to Dr Margot Edwards and Dr Darryl Forsyth for providing me with unfailing support, direction, and constant encouragement. It has been a long journey for them as well, and I am truly grateful for their assiduous and prolonged support.

I would also like to thank Dr Ralph Bathurst for his unwavering support over the years. He has been a valued confidant and a trusted friend.

I have also been enormously privileged to have a group of fabulous friends, the ‘handbags’: Kim Love, Anne Messervy, Siobhan Porter–Warren, Dr Grace Teo–Dixon, and Dr Barb Plester. I must also give special thanks to Amy Aldridge–Baker, for when life got in the way; to Heather Cartner, for believing in me from the start; to Dene Simpson, for her brilliance; and to Vicky Byles, for organising so many people in so little time. I would not have completed this thesis without their help, and I will always be truly grateful.

My final acknowledgements are to my husband, Dave, and daughters Madeleine and Imogen Croul; and to my parents, David and Valerie Edwards. Balancing work, thesis and family has been challenging, and I have been exceptionally fortunate to have a calm and relaxed partner, two beautiful daughters to keep things in perspective, and parents who have supported me from the very beginning to the very end.

This is for them.
# TABLE OF CONTENTS

ABSTRACT ..................................................................................................................II

ACKNOWLEDGEMENTS .........................................................................................III

TABLE OF CONTENTS ..........................................................................................IV

LIST OF TABLES ......................................................................................................XII

LIST OF FIGURES ..................................................................................................XIV

CHAPTER 1: INTRODUCTION ...............................................................................1

1.1 What is this study about? .....................................................................................1

1.2 What are workplace health promotion programmes? ......................................1

1.2.1 The benefits of employee participation ..........................................................3

1.2.2 The problem of low participation ..................................................................4

1.3 Conceptual design of the research ...................................................................5

1.3.1 Defining the concepts .....................................................................................6

1.3.2 Identifying the key predictor variables ............................................................7

1.3.3 Barriers to participation ...................................................................................9

1.3.4 Examining multiple activities .........................................................................9

1.4 Wider applications .............................................................................................10

1.5 Outline of the methodology ...............................................................................11

1.6 Thesis structure ................................................................................................11

CHAPTER 2: WORKPLACE HEALTH PROMOTION .......................................14

2.1 Literature review structure ...............................................................................14

2.2 Health and health promotion ..........................................................................15

2.3 Employee health ...............................................................................................16
3.5.1 Demographic indicators ................................................................. 48
3.5.2 Perceived health status ............................................................ 49
3.5.3 Perceived stress ................................................................. 51
3.5.4 Perceived job satisfaction .................................................. 52

3.6 Social variables associated with participation ............................ 53
3.6.1 Co–worker support .............................................................. 53
3.6.2 Supervisor support ............................................................... 54

3.7 Organisational variables associated with participation ............... 55
3.7.1 Organisational climate .......................................................... 56
3.7.2 Job flexibility ......................................................... 58

3.8 Barriers to participation ............................................................... 58
3.8.1 Commitments and a lack of time ................................................ 59
3.8.2 Lack of self–efficacy .............................................................. 60
3.8.3 Lack of trust ................................................................. 61
3.8.4 Inconvenient scheduling .................................................. 62

3.9 The New Zealand context: Practitioner interviews .......................... 63
3.9.1 Insights and relevant information provided by practitioner interviews 64

3.10 Summary of the literature ............................................................ 69

CHAPTER 4: METHODS ................................................................. 71
4.1 Research design rationale ............................................................... 71
4.2 The preliminary study ................................................................. 74
4.3 The questionnaire ................................................................. 75
4.4 Questionnaire participants ............................................................ 76
4.5 Questionnaire materials ............................................................... 81
4.5.1 Measuring the dependent variables ........................................ 81
7.8.4 Work with identified employee characteristics and perceptions...... 203

7.9 Study limitations and future research opportunities............................. 204

7.9.1 Measuring participation.......................................................... 205

7.9.2 Activities.......................................................... 205

7.9.3 Independent variables................................................ 206

7.9.4 Data collection .......................................................... 209

7.9.5 Sample characteristics................................................ 210

7.9.6 Measuring employee perceptions.............................. 212

7.9.7 Longitudinal studies ................................................ 212

7.10 Discussion chapter summary ................................................ 213

CHAPTER 8: CONCLUSIONS....................................................... 215

8.1 Overview of the study.......................................................... 215

8.2 Overall conclusions .......................................................... 216

REFERENCES ........................................................................ 221

APPENDICES ........................................................................ 259

Appendix A: Cover letter for practitioners ........................................ 259

Appendix B: Consent form for practitioners ...................................... 263

Appendix C: Preliminary study interview questions........................ 264

Appendix D: Cover letter for organisations........................................ 266

Appendix E: Questionnaire ................................................ 267

Appendix F: Information sheet for questionnaire participants ............. 275

Appendix G: Information sheet for Company X................................. 277

Appendix H: Information sheet for interviewees.................................. 279

Appendix I: Interview guide ................................................ 281
Appendix J: Ethics application (questionnaire) ................................................................. 283

Appendix K: Ethics application (interviews) ................................................................. 284
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Summary of the factors facilitating and restricting employee participation in workplace health promotion programmes described by health promotion practitioners</td>
<td>66</td>
</tr>
<tr>
<td>4.1</td>
<td>Activities available to staff in the five organisations involved in administering and completing the questionnaire</td>
<td>77</td>
</tr>
<tr>
<td>4.2</td>
<td>Response rate for each organisation involved in the quantitative study</td>
<td>78</td>
</tr>
<tr>
<td>4.3</td>
<td>Demographic information of questionnaire respondents</td>
<td>79</td>
</tr>
<tr>
<td>4.4</td>
<td>Demographic comparisons of questionnaire respondents and company profiles</td>
<td>80</td>
</tr>
<tr>
<td>4.5</td>
<td>Number of available cases analysed using logistic regression to determine variables associated with participation in health promotion activities</td>
<td>93</td>
</tr>
<tr>
<td>4.6</td>
<td>Number of available cases analysed using logistic regression to determine variables associated with participation in groups of health promotion activities</td>
<td>95</td>
</tr>
<tr>
<td>4.7</td>
<td>Omnibus test of model coefficients indicating goodness–of–fit</td>
<td>96</td>
</tr>
<tr>
<td>4.8</td>
<td>Demographic information of the 20 interview participants</td>
<td>98</td>
</tr>
<tr>
<td>5.1</td>
<td>Employees who did not participate in an activity because they considered they did not need to take part</td>
<td>109</td>
</tr>
<tr>
<td>5.2</td>
<td>Cronbach α internal reliability scores for the scales used in questionnaire</td>
<td>111</td>
</tr>
<tr>
<td>5.3</td>
<td>Employees who participated and did not participate in the nine health promotion activities investigated in the questionnaire</td>
<td>114</td>
</tr>
<tr>
<td>5.4</td>
<td>Odds ratios from logistic regression analyses predicting the effects of different variables on the likelihood of employees participating in workplace health promotion activities</td>
<td>119</td>
</tr>
<tr>
<td>5.5</td>
<td>Odds ratios from logistic regression analyses predicting the effects of different variables on the likelihood of employees participating in grouped workplace health promotion activities</td>
<td>122</td>
</tr>
</tbody>
</table>
Table 5.6 Reasons given by employees for why they chose not to participate in the nine health promotion activities that were available to them at work

Table 5.7 Significant associations between individual variables and the reasons for not participating in health promotion activities

Table 5.8 Significant associations between social variables and the reasons for not participating in health promotion activities

Table 5.9 Significant associations between organisational variables and the reasons for not participating in health promotion activities

Table 5.10 Reasons questionnaire respondents gave for not taking part in workplace health promotion programmes

Table 5.11 Summary of the variables associated with participation, and the barriers limiting participation, in different health promotion activities

Table 6.1 Employee participation in health promotion activities

Table 6.2 Thematic analysis of factors perceived to facilitate participation in the workplace health promotion activities available at work

Table 6.3 Thematic analysis of factors perceived to limit, reduce or hinder participation in workplace health promotion activities

Table 6.4 Thematic analysis of the reasons why employees stop participating in workplace health promotion activities

Table 6.5 Thematic analysis on recommendations for how managers can maintain participation in workplace health promotion activities

Table 8.1 Workplace health promotion activities and the characteristics of employees who are more likely to participate in them
LIST OF FIGURES

Figure 3.1    Visual representation of the proposed variables associated with employee participation in workplace health promotion programmes………………………………………………………45

Figure 4.1    Data collection methods used to gather information about the factors and barriers influencing employee decisions to participate in workplace health promotion programmes……………………………………………………73

Figure 5.1    Employee participation in health promotion activities, which were not included in the activities investigated in the questionnaire………………115

Figure 5.2    Individual, social and organisational variables investigated to determine any associations with employee decisions to participate in workplace health promotion programmes……………………………………………………116

Figure 6.1    Individual, social and organisational influences affecting participation among the 20 interviewees……………………………………………………………166