

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.

# **Evaluation of a Formal Mentoring Programme in the New Zealand Police**

A thesis submitted for the degree of Doctor of Philosophy in  
Psychology at Massey University, Albany, New Zealand.

Yvonne Julie Carleton

2004



**SUPERVISOR'S DECLARATION**

This is to certify that the research carried out for the Doctoral thesis entitled "Evaluation of a Formal Mentoring Programme in the New Zealand Police" was done by Yvonne Julie Carleton in the Psychology Department, Massey University, Albany Campus, New Zealand. The thesis material has not been used in part or in whole for any other qualification, and I confirm that the candidate has pursued the course of study in accordance with the requirements of the Massey University regulations.

**Associate Professor Paul Merrick**

**Date**

4 August 2004



**CERTIFICATE OF REGULATORY COMPLIANCE**

This is to certify that the research carried out in the Doctoral Thesis entitled  
“Evaluation of a Formal Mentoring Programme in the New Zealand Police” in  
the Psychology Department at Massey University, Albany Campus, New  
Zealand:

- (a) is the original work of the candidate, except as indicated by appropriate attribution in the text and/or in the acknowledgements;
- (b) that the text, excluding appendices/annexes, does not exceed 100,000 words;
- (c) all the ethical requirements applicable to this study have been complied with as required by Massey University, other organisations and/or committees (New Zealand Police) which had a particular association with this study, and relevant legislation.

Ethical Authorisation code:

Ethics Committee of Massey University - Approval number HEC97/155.

**Candidate's Name:**  
Yvonne Julie Carleton

**Signature:**

**Date:**

12th August 2004

**Supervisor's Name:**  
Associate Professor Paul Merrick

**Signature:**

**Date:**

4 August 2004



**CANDIDATE'S DECLARATION**

This is to certify that the research carried out for my Doctoral thesis entitled "Evaluation of a Formal Mentoring Programme in the New Zealand Police" in the Psychology Department, Massey University, Albany Campus, New Zealand is my own work and that the thesis material has not been used in part or in whole for any other qualification.

**Yvonne Carleton**

**Date**

4<sup>th</sup> August 2004

**Talent**

If a man has a talent and cannot use it, he has failed. If he has a talent and uses only half of it, he has partly failed. If he has a talent and learns somehow to use the whole of it, he has gloriously succeeded, and won a satisfaction and a triumph few men ever know.

**Thomas Wolfe** (1900–1938), U.S. author. *The Web and the Rock*, ch. 29 (1939).

**Mentoring**

Mentoring is seen as the recognition and aiding of a person reaching their full potential or more appropriately recognising talent and a mentor helps find the perfect route for that talent.

**Yvonne Carleton**

---

## Acknowledgements

---

Thanks to my initial Supervisors Bernie Frey and Hillary Bennett who started this project with me. My gratitude to Associate Professor Paul Merrick for taking over as my primary supervisor, being constructive in his feedback and helping me complete it. Special thanks go to my mentor and co-supervisor Dr. Suzanne Barker-Collo who through gentle and consistent persuasion got me through the final couple of years.

I would also like to thank the participants in this study who gave their time and effort to make the project a success.

Thanks also to Assistant Commissioner White who made this project possible.

My appreciation goes to the Auckland District Health Board especially Jude Glass and Janice Mueller who supported the written phase of this PhD.

Special thanks to my darling Chris who had to put up with PhD first, life second.

---

**TABLE OF CONTENTS**

---

Acknowledgements	vi
Table of contents	vii
List of figures	xii
List of tables	xiii
List of common abbreviations	xvi
Abstract	xvii
CHAPTER 1	
ORIGINS OF MENTORING IN THE NEW ZEALAND POLICE.	1
Historical context of this project - information from “Attrition in the New Zealand Police: Proceedings of the Disengagement Summit” Miller, (1998).	2
Occupational Stress in Policing	5
The concept of stress in health and occupational settings	11
Acute versus chronic stress	13
Occupational stress	16
Facets of Occupational Stress	17
Sources of Occupational Stress	18
Consequences of Occupational Stress	19
Stressful occupational settings	20
Impact of policing stress	24

Pathological consequences of prolonged occupational stress	24
Posttraumatic Stress Disorder	25
Depression	27
Suicidal Ideation/behaviour	28
Models of Occupational Stress	34
A model proposed for the current study	35
Mediators and buffers to occupational stress	37
Mentoring as a mediator	41
CHAPTER 2	
Mentoring	43
Coaching versus mentoring versus counselling	45
Characteristics of effective mentoring	48
The Current Situation	51
Formal versus informal mentoring	52
Mentoring and organisational change	55
Mentoring in the Police	56
Mentoring, Stress and Policing	58
Mentoring and the police – the intangible	59
The Current Study	59
Mentoring and hopelessness	61
Mentoring and well-being	61
Mentoring and distress	61
Mentoring and depression	62
Mentoring and intent to quit	63

Mentoring and Posttraumatic stress symptoms	63
Hypotheses	64
CHAPTER 3	
Method	66
General	66
Participants	66
Measures	68
Biographical information	69
Combined Measures Questionnaire	69
Beck Depression Inventory	69
Beck Hopelessness Scale	71
Mental Health Inventory	73
Hopkins Symptom Checklist – 21	74
Intent to Quit	77
Civilian Mississippi Trauma Scale	78
Mentor Relationship Questionnaire	81
Procedure	82
Selection of protégé(e)s	82
Selection of mentors	83
Training of mentors	83
Phases of the study	84
Phase I	84
Phase II	84
Phase III	84
A Priori Analyses	85

Phase IV	87
Phase V	88
Design	89
The Solomon Four Group Design	90
Computations	93
CHAPTER 4	
Results	96
Analyses	96
Section One: Overall performances of mentors and protégé(e)s	96
Section Two: Scale characteristics	108
Section Three: Group comparisons	109
Section Four: Between group and within subject comparisons	111
Section Five: A priori and post hoc power analyses	114
Section Six: Mentor relationship questionnaire analysis	114
The training package feedback	116
The mentor protégé(e) relationship	117
Commitment	117
Mentor responsibilities	118
CHAPTER 5	
Discussion	122
Hypothesis 1: Mentoring, psychological well-being and intent to quit	123
Hypothesis 2: Exploration of the success of the Mentor Relationship.	127
How effective was the mentor training package?	129
Participation and Attrition	130
Summary of findings	132

Limitations of this study and directions for future research	133
Future research	136
Conclusion	138
References	140

## Appendices

Appendix A	Combined Measure Questionnaire	175
Appendix B	Mentor Relationship Questionnaire (Mentor)	187
Appendix C	Mentor Relationship Questionnaire (Protégé(e))	190
Appendix D	Demographic questionnaire	193
Appendix E	Information Sheet (Protégé(e) Group – 2 sets)	195
Appendix F	Consent Form (Protégé(e) Group)	200
Appendix G	Information Sheet (Mentor Group – 2 sets)	202
Appendix H	Consent Form (Mentor Group)	207
Appendix I	Training Package - Booklet	209
Appendix J	Handouts to accompany training package	230
Appendix K	Mentor training day feedback form	244
Appendix L	Mentor training feedback form 6 months after training	246
Appendix M	Mentor – Protégé(e) contract	248

---

## List of Figures

---

- Figure 1 Mediation model of stress at work based on the path model  
(adapted from Ivancevich & Matteson, 1980). 15
- Figure 2 Social support as a mediator of stress at work based on a path  
model (adapted from Ivancevich & Matteson, 1980). 37
- Figure 3 The Mediating model of stress at work used in the current  
study (based on a path model - adapted from Ivancevich &  
Matteson, 1980) 41
- Figure 4 MacLennan's (1995) coaching continuum 47

---

**List of Tables**

---

Table 1	Description of the mentors and protégé(e)s in each of the four groups.	67
Table 2	Sample size calculations based on power to detect effect size in the current study by methodology with power set at .8 (Cohen, 1988)	86
Table 3	Solomon Four Group Design.	91
Table 4	Numerical values needed for the analysis of interaction effect in a Solomon Four Group design.	94
Table 5	Questionnaire distribution and timings.	95
Table 6	Means and standard deviations by group for the Mentors at the specified times during the study.	98
Table 7	Summary of total attrition rates - percentage [and number] for mentors by group and time, where n is the original number of participants allocated to that group.	99

Table 8	Means and standard deviations by group for the Protégé(e)s at the specified times during the study.	100
Table 9	Summary of total attrition rates - percentage [and number] for protégés by group and time, where n is the original number of participants allocated to that group	101
Table 10	Means and Standard Deviations for total sample at times 1-4.	102
Table 11	Means and Standard Deviations for total sample, demographic gender, at times 1-4.	103
Table 12	Means and Standard Deviations for total sample, demographic ethnicity, at times 1-4.	104
Table 13	Means and Standard Deviations for total sample, demographic qualifications, at times 1-4.	105
Table 14	Means and Standard Deviations for total sample, demographic sworn officer, at times 1-4.	106
Table 15	Means and Standard Deviations for total sample, demographic assigned duties (descriptive frontline), at times 1-4.	107

Table 16	Reliability coefficient- $\alpha$ of BDI, CMTS, HSCL, ITQ, MHI, and BHS.	108
Table 17	Summary of response ratings for selected questions from Mentor Relationship Questionnaire given to both mentors and protégé(e)s. Responses are shown with percentage of responses to that particular question in brackets.	121

---

### List of Common Abbreviations

---

BDI	Beck Depression Inventory
BHS	Beck Hopelessness Scale
CIB	Criminal Investigation Branch
CMTS	Civilian Mississippi Trauma Scale
HSCL-21	Hopkins Symptoms Checklist – 21
HSCL-PD	Hopkins Symptoms Checklist – Performance Difficulty
HSCL-GFD	Hopkins Symptoms Checklist – General Feelings of Distress
HSCL-SD	Hopkins Symptoms Checklist – Somatic Distress
HSCL-TOT	Hopkins Symptoms Checklist – Total
ITQ	Intent to Quit
MHI	Mental Health Inventory
PTSD	Post Traumatic Stress Disorder
TSS	Traffic Safety Service
NZ	New Zealand

---

## Abstract

---

Mentoring has been found to be an effective psychosocial buffer to occupational stress (Chao & Walz, 1992; Noe, 1988; Siegel & Reinstein, 2001). Mentoring provides support for personal confirmation, acceptance, friendship and role modelling (Kram 1985, 1986)

The current study was part of an initiative within the New Zealand Police to introduce mentoring as part of a supported induction for new Police Constables into the organisation. The aim was to evaluate the use of mentoring as a psychosocial support in this induction process. Using a Solomon Four Group design the 254 subjects (180 protégé(e)s and 74 mentors) were randomly assigned to four groups. These groups were (i) those who had a pre-test, assigned a mentor and post test (ii) those who had a pre-test and post test (iii) those who had a mentor and a post test (iv) those who had a post test only. Testing included two questionnaires; a Combined Measures Questionnaire - which incorporated six psychometric tests including BDI, BHS, MHI, CMTS, HSCL-21 and ITQ; and a Mentor Relationship Questionnaire. The former was administered at pre- and post- test in accordance with the experimental design while the later was only administered at the end of the mentoring programme.

There was no clinically significant effect noted in terms of change in psychological well-being or distress for either protégé(e)s or mentors ( $p > .05$ ). There was a significant effect of mentoring in terms of an increase in intent to quit,  $F(1,10) = 7.43$ ,  $p = .02$  and a trend toward significance for decreased general distress levels  $F(1,10) = 4.80$ ,  $p = .53$  for the mentors at the end of the experimental period. These findings are tempered

by a small control group ( $n=2$ ). The main finding of this study was that positive outcomes were reported about the mentor relationship, on the Mentoring Relationship Questionnaire, from both protégé(e)s and mentors. These results were achieved in less than three sessions. From these findings it may be concluded that there is a place for a formal mentoring programme in the induction process of the New Zealand Police organisation.