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# **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  
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- (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.

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**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**

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### List of Common Abbreviations

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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

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## Abstract

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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.

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# EVALUATION OF A FORMAL MENTORING PROGRAMME IN THE NEW ZEALAND POLICE

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## CHAPTER 1

The focus of the current study was on the introduction of a mentoring programme within the New Zealand Police and evaluating the impact that this programme had on its participants (both mentors and protégé(e)s). A primary goal of initiating this programme was to reduce the effects of stress on new Probationary Constables<sup>1</sup> (protégé(e)s). Therefore this project was placed within the context of the literature on stress and occupational stress.

### ORIGINS OF MENTORING IN THE NEW ZEALAND POLICE

This project had its origins in 1997 when the management of the police in New Zealand were focused on reorganising and restructuring, toward the goals of 'Policing 2000' – a management structural change and review that was designed to meet the needs of policing in New Zealand as the country entered the 21<sup>st</sup> century. This review and proposed restructuring had many facets, one of which was to consider attrition in the New Zealand Police. In 1997 as part of their strategy to address and investigate the impact of organisational change on staff, police management convened a summit on attrition from the New Zealand Police. Amongst the identified recommendations was

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<sup>1</sup> Probationary Constable – A sworn officer in their 18 month probationary period before their permanent appointment as a Constable.

the introduction of a formal mentor programme for Probationary Constables, as part of their induction process.

*Historical context of this project – information from “Attrition in the New Zealand Police: Proceedings of the Disengagement Summit” (Miller, 1998)*

The summit occurred between March 1997 and January 1998. It consisted of a scoping meeting, to set the terms of reference and suggested membership, followed by five consultative meetings. The focus of the summit was on the attrition of both sworn and non-sworn staff in the New Zealand police. The focus of the current study was on the induction of sworn staff. Therefore, this review in relation to the summit refers to sworn staff only.

Since 1990 the New Zealand Police organisation has undergone changes in its structure, management and demography. Traditionally the sworn staff of the New Zealand police consisted of two divisions – Uniform<sup>2</sup> and Criminal Investigation Branches [CIB]<sup>3</sup> (neither Uniform’s nor CIB’s primary function included traffic offences/safety issues). This constituent demography expanded in 1992 to include the Ministry of Transport Traffic Safety Service<sup>4</sup> (TSS) who until this time were the enforcement agency for traffic infringements/offences and traffic safety issues. Another change that occurred in 1992 was to the conditions of employment, which changed from a permanent employment contract to an initial 15-year term contract (with subsequent renewals of five years each for continuing service).

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<sup>2</sup> Uniform branch – Police in uniform doing the work associated with criminal offending and/or public safety.

<sup>3</sup> CIB – non-uniform Police doing the work associated with more serious criminal offending and/or public safety.

<sup>4</sup> TSS – primary role traffic law enforcement and no power for criminal enforcement duties.

The amalgamation of the New Zealand Police and Ministry of Transport Traffic Safety Service resulted in an increase in the number of police in New Zealand, from an average of 5,117 in 1990–1991 to an average of 6,824 in 1992 (Miller, 1998). Over the next five years, further governmental approval resulted in a net increase to 6970 at the end of 1997 – a net gain of 36.2% between 1990 and 1997 (Miller, 1998).

Between 1990 and 1997 the average age of serving police officers increased and the average length of service decreased (Miller, 1998). The statistics indicated an increase in disengagement<sup>5</sup> between 7–11 years service and 15–19 years service. Due to the significance of the loss of experienced staff, the purpose of the summit was to identify factors contributing to this attrition. The participants of the summit identified depression, anxiety, stress and posttraumatic stress reactions as the major reasons given for disengagement (Miller, 1998).

The participants of this comprehensive summit considered many factors including: resources, implications of attrition, legislative conditions affecting attrition, and occupational health factors. There was also consultation with other organisations such as the New Zealand Fire Service, New Zealand Defence Forces, psychologists, and focus groups from within the police. The consideration of attrition in this organisational context included the costs of premature exits and also identified management styles/skills as an area that needed further development and support.

The participants of the summit at this stage noted “the increase in police suicides was a concern” (Miller, 1998, p. 41). The police suicide rates were quoted by Dr. Miller as “around the national average for age matched peers” (p. 41). National

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<sup>5</sup> Disengagement – leaving the organisation under the Police Employment Rehabilitation Fund “PERF” – which provides compensatory payments to those who were unable to remain in the job due to physical, medical or psychological problems (Miller, 1998).

rates quoted were 17.1 per 100,000 per annum and 20.1 per 100,000 per annum for police. This concern raised at the Summit was highlighted by a recent instance when a Probationary Constable committed suicide. The coroner's report on the suicide cited lack of support or people who new Officers could turn to as a possible contributing factor.

There were many recommendations from this summit, one of which was the establishment of a formal mentoring programme including management training (Miller, 1998). The suggested aim of the mentor programme was to consider mental health issues and management skills training and to explore whether a mentor programme had benefits within the New Zealand Police. The scope of the project was not for a career mentor programme, rather mentoring to facilitate the induction process for Probationary Constables. A psychosocial model was adopted for mentoring which involved training mentors in leadership skills as well as in 'how to mentor'. This was part of a wider change to Police Management and was not a stand-alone initiative, thus the package was adapted to meet the needs of the organisation at that time. The above paragraphs reflect the context of the organisational change that was occurring within the New Zealand Police at that time.

As a result of this Summit, the current study was approved to implement a formal mentoring system known as "The Field Support Officer Programme" based on a psychosocial perspective to mentoring. The psychosocial perspective of the programme is reflected in its focus on being supportive and reducing stress for the protégé(e), rather than having the more traditional career development perspective of mentoring. The project was designed to provide Probationary Constables with support from a mentor, for at least the first six months of their new career with the

police. The outcome variables of interest to the management of the New Zealand Police were psychological well-being, suicide risk, and retention of new staff.

### *Occupational Stress in Policing*

Police Officers fill a unique role in society and are therefore subject to unique sources of occupational stress. Beutler, Nussbaum, and Meredith (1988) surmised that Police Officers work in a rare social system that requires the ability to adapt to unusual demands. Officers expose themselves to danger daily, and are willing to comply with supervisor's demands, withstand the angry outbursts of offenders, and act to control them. They need to balance contradictory roles such as law enforcer yet also protector of the public (e.g., arrest a person then help find a lost child), while maintaining a high degree of interpersonal sensitivity. This balancing role may adversely affect an individual over time if he or she does not have the requisite and rare skills to do so, and is not supported in doing so (Jackson & Schuler, 1985).

Cacioppe and Mock (1985) described seven major categories of stress experienced by Police Officers, namely: the individual; the nature of police work; peer pressures; management-supervisory difficulties; organisational problems; public/court/political pressures and the home social life (p. 46). Cacioppe and Mock found that the greatest stress on a Police Officer was a result of pressure from his or her departmental superiors whose measured performance and possibly advancement were dependent on the Officer's performance. Stress also tends to affect the middle management police administrators, since the 'man-in-the-middle' is receiving pressure from both above and below.

In terms of buffers to police stress, Cacioppe and Mock (1985, 1985a) studied stress levels in Police Officers, finding that the higher the self-actualisation the less

stress experienced by the Officer. Based on the literature reviewed, I hypothesised that mentoring may help individuals achieve better self-actualisation, thus reducing their stress.

Other literature of importance to the current study is the increase in occupational stress research conducted in the United States and Britain aimed at alleviating or reducing the effect of stressful events on Police Officers. One such study by Burgin (1975) divided stresses into two categories – uncontrollable and controllable. He considered uncontrollable stresses to include all those factors that were beyond the control of the individual, including: withdrawal of friends; negative reactions from non-police persons in both occupational and social settings; dealing with criminal elements or people involved in tragic circumstances; the required adjustment of one's circadian rhythm due to shift work; and court procedures and decisions.

Burgin (1975) further considered that controllable stresses could also be beyond the control of the individual Officer, but under the control of the police organisation, while having a more direct influence on the Officer. Examples of these included poor supervision, lack of resources, and inappropriate disciplinary procedures. A weakness of this categorisation is the externalisation in both groups: stress was viewed as beyond the control of the individual and therefore not able to be changed. This type of conceptualisation can also be seen in Hart and Wearing's (1996) structural equation model of coping in the police, in which personality characteristics, emotion or problem-focused coping, police hassles and uplifts, and job satisfaction are related.

Similarly, Kroes, a police psychologist, has completed several studies in relation to stress in American Police Officers (see Kroes, Margolis, & Hurrell, 1974). Kroes et al. (1974) suggested that, in general, stresses on Police Officers differ from those of other workers, and Police Officers are under more pressure and stress than other professionals. Kroes et al. identified that the role (occupation) itself sets the Officer apart from the rest of the community and thus contributes to police stress. Kroes et al. maintained that even when off the job and out of uniform, the Police Officer is not regarded as an individual but as a stereotype, thus his/her occupation affects his/her personal and social life. This increases the likelihood of social isolation, and impacts on the family's social life, and their children's perception of them as a parent. Kroes et al. suggested that stressors had a twofold impact on Officers, a direct effect and an indirect effect where a reduction in tolerance or ability of the Officer to cope with job stressors is caused by a reduction in available social supports. The focus of the current study was to investigate social support and its effect on stress reduction by introducing mentoring as a method of increasing social support, theoretically increasing the Officers' ability to cope, thus reducing the stress reaction.

In identifying particular aspects of the organisational culture<sup>6</sup> of policing, particularly within the context of New Zealand policing, that contribute to occupational stress, consideration could be given to Versteeg (1995) who pointed out that

One of the biggest mistakes we are making today, is we are asking people to go into teams, love each other, work together and focus on the business. And these poor people are saying yes – but what does that mean? What can I do?

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<sup>6</sup> Organisational culture can be defined as the shared values, beliefs, assumptions, and patterns of behaviour within an organisation (Ott, 1989).

What decisions can I make? Who do I need to go to for help? How am I supposed to do this? (p. 2).

The current researcher hypothesised that implementing a mentor programme to address these questions may increase the likely success of the process of induction, which in turn alters the climate of the organisation. In terms of organisational climate<sup>7</sup> police work is about teamwork, therefore an understanding of the structural and organisational variables which affect the functioning of the team is essential.

Cooper (1983) suggests that “People, the most important resource an organisation can possess should demand a great deal of attention from management but frequently do not” (p. 15). Fusilier, Ganster, and Mayes’ (1987) study of 312 full-time police and fire fighters provides an example of an organisational climate study in the area of policing. Fusilier et al. (1987) found that role stressors such as role conflict and ambiguity exacerbated depression and somatic complaints. Not only are the sources of stress for police different from other occupations, but the level of occupational stress that Police Officers experience changes throughout an Officer’s career. In relation to this, Violanti and Marshall (1983) found that stress increased sharply during the first five years as a Police Officer and continued at a relatively high level for the next five years. This is consistent with Miller’s (1998) findings on New Zealand Police with attrition increasing around the 7 and 15 year marks. Violanti and Marshall offered a definition of stress which is particularly applicable to police work, where “Stress is a perceived imbalance between social demands and perceived response capability; under conditions where failure to meet demands has important

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<sup>7</sup> Organisational climate– atmosphere, ambience, surroundings, environment, or conditions within the organisation that relate or contribute to the ability to work or complete work (Drenth et al., 1998).

consequences” (p. 211). Thus it could be perceived that the organisational context of policing increases occupational stress through increasing demands and uncertainty.

Hart and Wearing (1996) studied a group of Australian Police Officers as part of their six-year study on occupational stress among public sector employees. One of the conclusions in relation to occupational stress, which was of particular relevance to the current study was: “In terms of prevention, it is more important to develop a supportive organisational climate that helps employees to manage their work more effectively, rather than to change employee’s operational demands”. (Hart & Wearing, 1996, p. 186). Considering Hart and Wearing’s findings it was theorised that mentoring would help to provide a supportive organisational climate and thus reduce stress on new staff.

Hart and Wearing’s (1996) model focused on stress as an outcome of a system of variables and resulted in a complex structural equation model of stress. When planning the current study, although this model was considered, it was decided that the scope of the current study was better explored within the context of a social support mediational model because of the need to use an experimental design and to examine the causal links.

More recent research in the area of factors that influence Police reactions to stressors consider social support in various ways including social interactions (Morris, 1996), supervisors (Brough, 2004), and marriage (Moore, 2004). Other researchers considered the impact of stress on relationships (Mickelsen and Burke, 2004). Morris’s study included positive (non-formal) social interactions including availability of supervisors and co-workers, mentoring and role models and participation in social networks. Mentoring was assessed with the use of nine items that rated the presence

of role models, mentors and persons in the work environment from whom the respondent could model job behaviours. The focus of Morris's study was on gender and ethnic differences rather than social support. Thus, mentoring had been grouped together with role models, and anyone else in the social networks who would function as role models, therefore although mentoring was part of the study, no conclusive comments were made directly about mentoring in relation to social support and its effect.

Brough (2004) considers staff training programmes including "supportive" supervisors as a way to reduce stress exposure and the consequences of such stressors. Brough's study compared the influence of traumatic and organisational stressors on the psychological health of police, fire and ambulance officers. Organisational hassles was a stronger predictor of job satisfaction but did not predict psychological strain, whereas Operational hassles had a direct influence on psychological strain.

Moore (2004) in her study on social support systems for couples. Interviewed six couples to consider the impact of occupational stress and effectiveness of coping strategies on marital relationships of police. Examined perceived sources of occupational stress for the officer, effects of stress on the couple, social support and coping strategies utilised to manage stress.

Mikkelsen & Burke (2004) found there was more work-family conflict reported in younger officers, shift workers, those under more quantitative demands, those who hid their emotions and those who reported more exhaustion. A limitation of

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<sup>11</sup> Emotion-focused coping consists of efforts to regulate the emotional distress caused by harm or threat e.g., avoidance or distraction techniques (Crandell & Perrewe, 1994)

this study was that all data was collected using self-report questionnaires, raising the possibility of common-method variance.

It is clear from searching the literature and reviews of relevant literature, that there is still a lack of research in the areas of the induction process and social support for recruits in the Police.

### *The concept of stress in health and occupational settings*

The research literature on stress includes an abundance of definitions, concepts and attitudes about stress. Some of the earliest biophysical research on stress was undertaken in the 1940s. This early biophysical research was criticised for its oversimplistic portrayal of stress as a mainly physiological response to a stimulant. More recently, stress has been broadly defined as the body's physiological, emotional, behavioural and cognitive reaction to a stressor, where a stressor is any situation, demand or circumstance which requires adaptation or adjustment in order to maintain equilibrium (Selyé, 1976; Selyé & Tache, 1985). Selyé's ground breaking work was the first to establish a correlation between psychology and health, resulting in his published theory of stress and illness in 1956 (Selyé, 1976). Selyé differentiated between 'eustress', a positive response to the environment that facilitates growth, and 'distress' as a negative response to the environment resulting in physical and psychological maladaptation (Selyé, 1976; Selyé & Tache, 1985).

Other recent definitions of stress include that based in Pitts and Phillips' (1993) psychological-cognitive approach and Benner and Wrubel's (1989) phenomenological viewpoint on stress. Pitts and Phillips defined stress as a situation involving the interaction of an individual and their environment, and they argued that an understanding of the psychology of stress is central to our understanding of how

psychological pressure can have pathological consequences. Benner and Wrubel's view of stress was based on the individual's grasp of the meaning of the situation and the individual's perception of challenge, threat or harm. Thus Benner and Wrubel believed that if a perception of threat or harm disrupts the individual's ability to function smoothly it is defined as stress, and results in harm, loss or challenge experienced.

Judging whether an event is stressful is only the beginning. This judgement is defined by the individual's subjective perception of the event (Kimball, 1982). The reaction to the stressor is then ameliorated by the adequacy of coping strategies used to react to the stressor. Thus the optimal response to stress will result in the stress being over sooner than would a sub optimal response (Kimball, 1982). Further, change is reported as a theme common to all stressful life events and the degree to which change is perceived as stressful is proportional to the perceived control the individual has over the event (Bell, Le Roy, Lin, & Schwab, 1981). Considering these theorists and the research in the area, it was expected that mentoring would help produce an optimal stress response, thus decreasing psychological distress (as measured by instruments sensitive to this distress used in the current study).

Interpretation of the word stress has led to another body of research, including Jex, Beehr and Roberts (1992) who explored the effect of using the word stress in the measurement of self-reported occupational stressors and strains. Jex et al. (1992) examined how respondents understood the word stress, and pointed out the possible confounds brought about by the incorrect choice of items when the items did or did not include the word stress. Jex et al. found that respondents tended to interpret the word stress to refer both to employees' strains or reactions to the work environment

and to job stressors or elements of the environment itself. Stress items correlated highly with both stressors and strains, with the highest correlation being with anxiety (strain). Therefore it was suggested that the use of the word stress should not be included in items as it was likely to be a potential confound for the research. This was useful at the planning stage of the current study, and where possible the word stress was excluded from the questionnaires.

### *Acute versus chronic stress.*

When adjusting to stress the chronicity of the stressor is a factor. Processes of adjustment to discrete events may also differ from adjustments to ongoing chronic strains (Pearlin, Lieberman, Menaghan, & Mullin, 1981). Quittner, Glueckauf and Jackson (1990) pointed out that a boost in support around a single event may be beneficial in increasing that person's social contact and information. This has implications for the current study in that the person is entering a new career and a new organisational culture. In the current study, becoming a new officer was considered a single stressor in relation to which increased social support (mentoring) should be of benefit. The same support for an ongoing (chronic) stressor would not be so beneficial. These sorts of investigations have led to a body of research that includes how a stressful event impacts on daily functioning and ongoing processes or the adaptation to the life event (Caspi, Bolger, & Eckenrode, 1987). The impact of a chronic stressor is more insidious, with the individual continually needing to adapt as the stressor impacts on more facets of their life (Quittner et al., 1990).

Social support models that have been commonly used to identify how social support modifies outcomes of stress include the direct effects and 'buffer' models. The direct or main effects model suggests that social support exerts beneficial effects

on psychological well-being regardless of the individual's level of stress (e.g. Kessler & Essex, 1982). Social resources are seen as a means to lessen the likelihood of symptom development (Norris & Murrell, 1984). In contrast to this is the buffer model that predicts an interaction between levels of stress and social support. The model predicts that those who have well-developed and satisfying support will have lower negative impact of stress (Henderson, 1980; Wilcox, 1981). Quittner, Glueckkauf and Jackson (1990) propose a third possible model – that of an indirect mediator model, where social support functions as an intervening variable between the stressor and outcome.

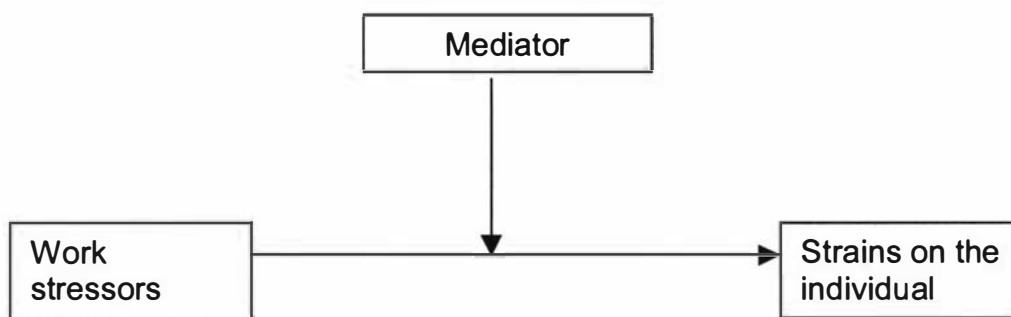
The difference between mediating and moderating variables/effects can be confusing. A moderator variable is a qualitative or quantitative variable that affects the nature, the direction or the strength of a relation between an independent or predictor variable and a dependent or predictor variable (Arnold, 1982; Baron and Kenny, 1986 cited in Smith, Smoll & Ptacek 1990).

“A moderating variable is represented statistically by an interaction with the dependent variable, which on a conceptual level specifies the conditions under which the variable exerts its effects” (Quittner et al., p1267).

A mediating variable is tested using the path-analytic model and functions to “account for the relation between the predictor and criterion” (Baron & Kenny, 1986, p.1176). Thus mediators attempt to describe *how* effects occur, rather than *when* certain effects will occur.

As the present research is investigating how mentoring influences the relationship between stress and well-being, it was proposed mentoring would act as a social support in the stress-strain path model, mediating the impact of stress.

The current study's theoretical foundation was a social support model of occupational stress because there is strong support in the literature (Drenth, Thierry, & de Wolff, 1998; Edwards, 1991,1992; Jex et al., 1992), and this model's relevance to mediational theory (Ivancevich & Matteson, 1980; Quittner et al., 1990). The three major components that will be examined are stressors, strains and the mediator to this stress-strain relationship. Figure 1 is based on research by Ivancevich and Matteson (1980), which represents a general research model of job stress-strain and theorises that there are variables mediating this relationship. The basis of the current study's mentor relationship is within this "mediational" model of stress-strain in organisations.



*Figure 1.* Mediational model of stress at work based on the path model (adapted from Ivancevich & Matteson, 1980).

## *Occupational Stress*

Arnold, Cooper, and Robertson (1995) defined occupational stress as any force that pushes a psychological or physical factor beyond the individual's range of ability, producing strain within an individual. Arnold et al. (1995) further stated that for cognitive theorists, the emphasis is on the ways individuals appraise potentially stressful situations.

Similarly, Edwards (1992) asserted that three categories of stress definitions have developed in stress literature: stimulus, relational, and response definitions. Each of these three categories can be applied to aid in the understanding of occupational stress. The stimulus and relational definitions focus on the antecedents of strain; response definitions focus on stress as an outcome "that deviates from normal psychological or physiological functioning" (Edwards, 1992, p.246). Stimulus definitions focus on environmental factors or stressors that define an individual's experience of a situation or strain (Edwards, 1991, 1992), thus exposure to stressors produces strain. Thus occupational stress includes organisational change, deadlines, lack of support, and lack of autonomy. Relational definitions focus on stress as part of the relationship between an individual and their environment. The cognitive processes by which the individual interprets situations or events form an interactive perspective of the stress experience. This includes the cognitive appraisal of the stressor and the coping strategies available to the individual, which in turn influence the way the individual responds to the situation. As the definitions alter so do the research methods and theoretical approaches to the study of occupational stress.

For example, Jex, et al. (1992) considered a stimulus, a response and a stimulus-response relationship definition of occupational stress. In their work, a

stimulus definition of occupational stress refers to a job stressor, which is any event in relation to work that requires some form of adaptive response. Stimulus definitions apply to any outside force on an object (person) and strain is the harmful effect of that force (i.e., stressor). A response definition of stress is associated with an individual's response to environmental stressors, such as Selyé's (1976) reference to stress in terms of the individual's psychological, physiological or behavioural reaction to events. In following from these reactions to events, Jex et al. defined the stimulus–response approach as the interaction between environment, stimuli and individual responses.

In their review of definitions of occupational stress, Elsass and Veiga (1997) concluded that existing definitions of occupational stress were fluid and lacked clarity. Elsass and Veiga pointed out that confusion lies between the causes and consequences of work related stress, partly due to the controversy regarding the definition of stress itself, and partly due to the theories of work stress (e.g., Beehr & Newman, 1978; Edwards, 1991, 1992; Karasek, 1979). In their review Elsass and Veiga highlight some of the reasons that there is no consistent theory or definition when researching in this area.

### *Facets of Occupational Stress.*

There are many categories of psychological variables and processes that are involved in occupational stress (Beehr & Franz, 1986; Drenth et al., 1998). They relate to the emotional stress process in different ways. Stressors in relation to the current study are the psychosocial factors relating to induction and adjustment to a new career. In general coping behaviour refers to the way an individual tries to change, reinterpret or reduce negative emotions through modifying the causes of these

emotions (Baroness, 1997; Beehr & Franz, 1986; Caspi et al., 1987; Dymock, 1999). For example in the current study the use of a mentor was to produce beneficial coping behaviours, which would reduce short and long term occupational stress effects for example, burnout in police officers (Cannizzo & Liu, 1995).

The result of long-term occupational stress on the health of the individual are in areas such as burnout, depression, psychosomatic complaints and impairment in physical health (Drenth et al., 1998).

When exploring occupational stress it is useful to consider that despite changing methods and definitions, occupational stress is consistently related to employee health and well-being (Beehr & Newman, 1978). Indeed stress is a fundamental element of the work environment as well as organisations as a whole (e.g., Beehr & Newman, 1978; Burke, 1984; Cooper & Marshall, 1976; Cooper, 1983, 1998; Israel, Baker, Goldenhar, Heaney & Schurman, 1996; Kirkcaldy, Cooper, Eysenck, & Brown, 1994; Schwartz, Pickering, & Landsbergis, 1996; Spector, Dwyer, & Jex, 1988; Warr, 1996; Wong, Cheuk, & Rosen, 2000). Growing concerns about the impact of occupational stress on both employee well-being and organisational effectiveness have stimulated efforts to understand the sources of stress in the workplace.

### *Sources of Occupational Stress.*

The various sources of occupational stress have been linked to a diverse set of physiological, psychological and behavioural outcomes (Israel, House, Schurman, Heaney, & Mero, 1989). The sources of occupational stress have most frequently been identified in association with the following diverse factors: workload, role ambiguity, role conflict, job loss, shift work, coping, noise, pollution, poor relationships with co-

workers and supervisors, lack of participation in decision-making, organisational change, and lack of control of work processes (Cooper & Marshall, 1976; Cottington & House, 1987; Holt 1982; Israel et al., 1989). These identified factors can be easily recognised in the Police and it would therefore be expected that those moving into this as a new career would be subject to these types of occupational stressors.

Revicki and May (1989) studied the impact of role ambiguity perceived by nurses on occupational stress and found that increased role ambiguity led to decreased job satisfaction and increased perceived stress. Revicki and May found that the organisation influenced the work environment by directly influencing job stress and that occupational stress had a direct influence on the development of depressive symptoms. Therefore based on the literature it was anticipated that the concerns raised by the New Zealand Police (Miller, 1998) would be reflected by participants in the current study.

### *Consequences of Occupational Stress.*

Agreement is seen in the literature that the costs of occupational stress are high, both in monetary terms and in terms of personal health. Kearns (1986, as cited in Fletcher, 1988) suggested that 60% of absences from work are caused by stress-related disorders, and in the United Kingdom alone 100 million working days are lost each year because people cannot face the stress of going to work.

The dramatic increase in occupational stress research over the past twenty years is a reflection of increased awareness and concern about the relationship between stress and many physically and socially debilitating outcomes. Reviews of the extensive literature on occupational stress have generally concluded that prolonged exposure to certain stressful job demands such as shift work, lack of autonomy and

extended hours can lead to a variety of pathological outcomes, including mental and physical disorders, absenteeism and reduced productivity (Fox, Dwyer, & Ganster, 1993). For example, Landsbergis (2003) talked of recent trends in the organisation of work, and how they may impact on worker health. He identified that this trend increased the risk of stress-related illnesses, such as cardiovascular disease, musculoskeletal disorders, and psychological disorders, through a variety of pathways, including increased exposure to hazardous substances and violence on the job, or by affecting occupational health services and training programmes. Although available evidence is limited, such evidence includes recent trends in work organisation may be increasing the risk of occupational illnesses (Arsenault & Dolan, 1983; Landsbergis, 2003). Miller's (1998) report is consistent with the literature relating to occupational health, and the concerns this report raised about the psychological health of Police in New Zealand.

### *Stressful occupational settings*

Occupational groups such as Air Traffic Controllers, nurses, the armed forces, and physicians share similar environmental stressors to the police. The common theme seems to be shift work, lack of sleep, social isolation, responding to emergencies and organisational change.

In a study on Air Traffic Controllers, Repetti (1993) considered daily changes in two job conditions – workload, and social interaction with co-workers and supervisors – in relation to daily mood and health complaints. The results indicated that increases in job stressors (i.e., increased workload and decreased social interaction) are associated with a same-day deterioration in both physical and psychological well-being. On days in which workload related stress was higher, Air

Traffic Controllers reported more health complaints and moods that were more negative and less positive.

Bowman and Stern's (1995) study on nurses investigated perceived control and coping strategies used in relation to two stressful occupational episodes. Measures were used to assess the effectiveness of coping across the dimensions of perceived coping, coping effectiveness, job affect and psychological adjustment. Bowman and Stern concluded that the differential use of coping across levels of controllability was not related to job affect or psychological adjustment, while avoidant coping was strongly associated with negative affect at work. In contrast, problem–reappraisal and problem–solving strategies were related to positive affect at work, and reduced occupational stress. Bowman and Stern referred to Lazarus and Folkman's (1984) model of stress and coping, and stated that problem–focused coping is most effective with stressors that are perceived as being controllable. In agreement with this, Bowman and Stern (a study on nurses), found that occupational coping with a problem–solving focus was only perceived as effective if the situation it was related to was perceived to be amenable to change. From a phenomenological view put forth by Lazarus and Folkman stress is a disruption to meanings, understanding and smooth functioning so that harm, loss or challenge is experienced. Thus, controllability (“perceived control”) is a key factor to understanding stress. In the current study it was hypothesised that mentoring would increase perceived control by giving support through the mentor relationship and thus reduce perceived stress.

In surveys for the European Foundation and European Commission Paoli and Costa (1994) found that stress is the primary complaint among European workers (European Agency for Safety and Health at Work, 2000). Indeed Di Salvo, Lubbers,

Rossi, and Lewis (1995) indicated that 50% to 80% of the diseases experienced by employees were stress-related and that job-related stress resulted in organisational problems, such as low job satisfaction and low productivity. In addition, the demands of the workplace have become progressively greater, with a nationwide study of occupational stress in the United States revealing that the proportion of workers who reported "feeling highly stressed" had more than doubled from 1985 to 1990 (Spielberger & Reheiser, 1995).

Clegg (2001) pointed out in her review of the literature that nursing is one of the many areas in which a huge body of research can be found in relation to outcomes of occupational stress. Staff sickness and absenteeism is a major problem within the National Health Service (NHS) in England. Clegg reported that in 1994, the average number of working days lost per year in the private sector per employee through sickness was eight days, equivalent to 3.4% of available working time. The NHS, in comparison, lost the equivalent of 6% of available working time per employee. Clegg found that the direct costs of absent nurses in several NHS Trust were in excess of 1 billion pounds per year. It is no surprise that occupational stress is now accepted as a major factor in the high sickness and absence rates within nursing (Kunkler & Whittick, 1991). Vagg and Spielberger (1998) identified job pressure and lack of organisational support as major dimensions of occupational stress for employees in a wide variety of work settings. Similarly, Tyssen, Vaglum, Gronvold, and Ekeberg (2000) found that job stress (similar to the police, i.e., shift work and responding to emergencies) is related to mental health problems among young doctors, even when the variables of previous mental health problems and personality traits are controlled for.

Matteson and Ivancevich (1987) reported on several stress-related estimates of high fiscal significance, for example the United States Clearinghouse for Mental Health Information reported that United States of America industry has an annual \$17 billion decrease in production capacity primarily due to stress related problems. Other estimates are that at least \$60 billion is lost annually in the United States because of stress-related physical illness (Matteson & Ivancevich, 1987). Additionally, approximately 75% to 85% of all industrial accidents are caused by an inability to cope with stress, and these accidents are estimated as costing the United States \$32 billion per annum (Matteson & Ivancevich, 1987). Hatfield (1990) estimated the figure lost to the United States of America as between \$50 and \$150 billion. The National Science Foundation concluded that stress costs over \$100 billion annually and that this sum is ever-increasing (Matteson & Ivancevich, 1987). Indeed, stress-related headaches, though seemingly innocuous, are actually the leading cause of lost work hours in American industry. Although the above figures appear staggering, others (e.g., Beehr & Newman, 1978) caution against their use because of the potential confounds of other non work-related stress, additional unrecorded costs and other factors. The New Zealand Ministry of Health (personal communication, 16<sup>th</sup> June 2004) were asked for comparative figures in this area and it was reported there are no data available for the cost of stress related illness in New Zealand.

### *Impact of Policing Stress.*

Research in the area of stress in relation to Police Officers mainly relates to those officers in Britain and America. There is a general lack of research involving New Zealand Police, especially in relation to occupational stress and occupational stressors. Therefore, for the purpose of the current study, it was assumed that New Zealand Officers face similar stressors to those identified in British, American and other studies.

Although police face unique sources of occupational stress, the main impetus behind addressing occupational stress within the policing context has been the identification of the potential serious impact of this occupational stress. For example, should staff not have the skills required to fulfil job requirements it is possible that they will suffer from higher levels of stress, and propensity to leave the profession (i.e., high turnover) is hypothesised as one of the major negative consequences of such stress (Jackson & Schuler, 1985). Support is found in the literature for Miller's (1998) considerations on attrition.

### *Pathological consequences of prolonged occupational stress*

Reviews of the extensive general literature on job stress have concluded that prolonged exposure to stressful job demands can lead not only to generalised stress, as defined above, but also to a variety of pathological outcomes, both mental and physical disorders (Fox et al., 1993).

Some of the specific outcomes investigated in relation to occupational stress and policing include not only intent to quit, but post traumatic stress disorder, depression, and suicidal ideation/behaviour (Fox et al., 1993). Based on Miller's

(1998) report and New Zealand Police management concerns, these are the areas focused on by the current study and will now be reviewed.

*Posttraumatic Stress Disorder (PTSD).*

Barlow and Durand (2002) defined PTSD as:

Enduring, distressing emotional disorder that follows exposure to a severe helplessness– or fear–inducing threat. The victim re–experiences the trauma, avoids stimuli associated with it, and develops a numbing responsiveness and an increased vigilance and arousal. (p. G–15).

Police can be faced with this type of threat on a daily basis, therefore it is not surprising to find information in the research that in addition to the policing role, the impact of traumatic exposure is a unique contributor to job stress in policing. Neylan et al. (2002) studied the negative impact of critical incident exposure (trauma exposure) and routine (non–traumatic) work environment stressors on sleep quality in Police Officers after controlling for the effects of work shift schedule. Neylan et al. found that, in general, a large percentage of Police Officers report disturbances in subjective sleep quality. Nightmares were more related to the traumatic/life–threatening aspects of police work, and routine stressors of police service seemed to most affect global sleep quality (Neylan et al., 2002). This lack of sleep affects work performance and ability to cope with job stress.

In another study Carlier, Lamberts, and Gersons (1997) examined Dutch Police Officers and the occurrence of PTSD symptoms and risks factors for these symptoms. They found severity of trauma exposure was the only predictor of symptom severity. They also found that whilst only 7% of their study sample had PTSD, 34% of Officers were coping with PTSD symptoms. Carlier et al. (1997) found

these levels consistent with other research findings they reviewed. Social support was found to decrease the risk of PTSD. Another consideration that became apparent from the research review was that similar to Carlier et al.'s findings, about 7% of New Zealand Police also suffer from symptoms of PTSD (Stephens, 1996).

Rivers (1993; a study on the United Kingdom Metropolitan Police) purported that Police Officers, by the nature of their job, are frequently exposed to traumatic incidents, often of a life-threatening nature. As a result of dealing with these traumatic events, Police Officers may experience a range of normal, yet stressful, reactions. Further, these reactions include guilt, anxiety, apprehension, sleeplessness, irritability, aggression, and lack of motivation, with any one of these reactions affecting the Police Officers. As well as these reactions occurring as the result of one event they may equally be the result of an accumulation of events. This is termed "sequential traumatization" (Rivers, 1993). Constant exposure to traumatic incidents renders an Officer particularly vulnerable to the effects of sequential traumatization.

Many of the symptoms of PTSD (e.g., flat affect, angry outbursts, depersonalisation – American Psychiatric Association [APA], 1994) could be significant confounds to the study of mentoring, as mentoring relies on the ability to build rapport with warmth and empathy. If a person has, for example, flat affect, this could lead to difficulty in interpreting results, in that the relationship may fail because of an inability to build rapport, due to the flat affect being interpreted as lack of interest. Thus, it was decided to incorporate a PTSD symptom scale into this study to help identify the possible confounding effect of this variable.

### *Depression.*

When considering depression within the context of general occupational strains, some authors report that high-level striving increases psychological distress and the risk of depression (Emmons, 1992), while others quote single life as a risk factor (Revicki & May, 1989). Studies and measures of depression are diverse. For example Sears, Urizar, and Evans (2000) examined occupational stressors, coping strategies, burnout, and depression in extension (insurance) agents. There was a recognised cut-off for each of the burnout and depression scales used to estimate these two variables. A significant proportion of extension agents (range = 9.8% to 51%) reported burnout symptoms above this cut-off, and in approximately 26% of the sample depressive symptoms were above established cut-off scores. Further, Sears et al. (2000) found that those who used a more emotion-oriented (emotion-focused)<sup>11</sup> coping strategy displayed higher levels of depression and burnout than those who used task-oriented (or problem-focused) coping strategies<sup>12</sup>.

Pancheri et al.'s (2002) study on the assessment of subjective stress in the Municipal Police of the City of Rome found significant differences between the total scores of traffic and clerical Police Officers. In the analysis of the sub-sample, traffic Police Officers were found significantly more often in the 'high stress class' and a significantly greater 'depression' cluster was found at the end of the shift only in traffic Police Officers.

Considering the literature reviewed including research relating to Police, it was likely Miller's (1998) report accurately described the New Zealand Police levels of depression.

### *Suicidal Ideation/Behaviour.*

As previously stated, of particular interest to the New Zealand Police at the time of this study was the recent occurrence of the suicide of a Probationary Constable in which lack of social support and occupational stress were put forward by the coroner as contributing factors (Miller, 1998). Given these recent events in combination with the above information on depression, one aspect of this project was to obtain information regarding the prevalence of suicidal ideation within the policing population/sample.

Suicidal ideation occurs at a higher rate than attempted or completed suicides. Estimates of the rate of occurrence of suicidal ideation vary within the general population, with Vandivort and Locke (1979) estimating 5.4% and Schwab, Warhiet and Holzer (1972) estimating 15.9%. Suicide is not considered predictable, but individuals may be divided into those at high and low risk of suicidal behaviour (Bergin & Garfield, 1994; Davison, Neale, & Kring, 2004; Kaplan, Sadock, & Grebb, 2002). Severe depression, hopelessness and social isolation are all risk factors for suicide.

Davison et al. (2004) purport there is evidence that depression with hopelessness is a strong predictor of suicidal ideation, in contrast to the earlier assertion of Beck and colleagues who believed hopelessness is a stronger predictor of suicide than of depression (Beck, Steer, Kovacs, & Garrison, 1985; Beck, 1986; Beck, Brown, Berchick, Stewart, & Steer, 1990).

There are many other factors identified as predictors of suicide. Although women report more suicide attempts, men have more fatal suicidal behaviour, and

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<sup>12</sup> Problem focused coping consists of efforts to alter the actual relationship, as when we seek

more men than women complete suicide, there seem to be equal numbers of men and women who think about suicide (Harlow, Newcombe, & Bentler, 1986; Lester, 1994, 1995; Rudd, 1990; Vandivort & Locke, 1979). In addition to depressed mood, 80% of all suicides or attempted suicides are associated with depressive disorders (Kaplan et al., 2002). Risk factors include impulsive behaviour, violence and social isolation (Kaplan et al., 2002).

Although depression and hopelessness alone are not perfect predictors of suicide, they are indicators and therefore their identification can be used as a tool in suicide prevention (Bergen & Garfield, 1994; Davison et al., 2004; Kaplan et al., 2002). Hopelessness has been identified as one of the core characteristics of depression and implicated in suicide (Beck, 1963). Beck (1963, 1967) found that suicidal wishes had a higher correlation with hopelessness than with any other symptom of depression. The Beck Depression Inventory (BDI) was designed to include all symptoms of depression and also to provide a grading of the intensity of each. Beck (1963) claims it has both validity and reliability and correlates well with clinical ratings of depression in individuals. It is also an effective scale to distinguish between depression and anxiety. The BDI is one of the most commonly used measure of depression (Steer & Beck, 1988), though as with any other self-rating scale, response sets are an issue (Beck, 1967).

In terms of the Beck Hopelessness Scale (BHS) Beck's theory of depression is based on the 'cognitive triad'. Each of this triad of negative future expectations, negative thoughts about the self, and negative thoughts about others, is tapped by this measure. The construct validity of the scale has been demonstrated in a number of

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information about what needs to be done and change either our own behaviour or take action on the environment (Crandell & Perrewe, 1994).

studies, with the theoretical idea of hopelessness as the variable that accounts for the relationship between depression and suicidal ideation (Weishaar & Beck, 1992).

As previously noted in relation to suicide risk, psychological factors such as levels of stress, depression and hopelessness have been identified in research as contributing to suicidal attempts, ideation and completion (Linehan, 1986; Linehan, Camper, Chiles, Strosahl, & Shearin, 1987; Linehan, Chiles, Devine, Laffaw, & Egan, 1986; Marks & Haller, 1977). When examining the suicide literature Bonner and Rich (1988) put forward the view that suicide is “a complex process rather than a static isolated event” (p. 246). Bonner and Rich believe suicide is best defined as a sequence of events that progresses from suicidal ideation, and given the presence of the appropriate conditions called ‘influence variables’, leads to suicidal contemplation or planning, after which certain variables determine whether this results in an attempt.

Boardman, Grimbaldston, Handley, Jones and Wilmott (1999) aimed to identify socio-demographic and clinical risk factors for death from suicide and undetermined injury in residents of one English health district – North Staffordshire Health District – between 1991 and 1995. Boardman et al., found that the risk of death due to suicide and undetermined death was associated with the following factors: recent separation, relationship difficulties, experience of financial difficulties, history of past criminal charges or contact with the police, a past history of deliberate self-harm, being on psychotropic medication at the time of death and a diagnosis of bipolar affective disorder.

Diekstra and Garnefski (1995) reviewed data from international and national data banks as well as conducting a literature review, to examine changes in suicide mortality and morbidity over time. Their findings indicated that a true increase in

suicide mortality and morbidity has occurred over the latter part of the 20<sup>th</sup> century among white urban adolescent and young adult populations of North America and Europe. Lipschitz (1995) explained the rate of suicide doubling in young adults in America since 1950, by considering those diagnoses and population groups whose high rates of suicide contribute most to this increase. These included those with mood disorder, schizophrenia, personality disorders, substance abuse, and medical illness.

Although there are numerous studies on suicide, suicide is not a widely studied phenomenon in the police or similar organisations such as the military. Marzuk, Nock, Leon, Portera, and Tardiff (2002) assessed the suicide rates of New York City Police Officers during the period from 1977 to 1996. The authors reviewed death certificates of 668 active New York City Police Officers who had died during this period. It was found that the police suicide rate was 14.9 per 100,000 person–years, compared with a demographically adjusted suicide rate of New York City residents of 18.3 per 100,000 person–years. Suicide rates among male Police Officers were comparable to their reference population, but despite the number of suicides of female Police Officers being small, female Police Officers had a higher risk of suicide than female residents of New York. Marzuk et al. (2002) concluded that the overall rate of suicide among New York City Police Officers is equal to, or even lower than, the suicide rate of the city's resident population.

In terms of demographics, the age standardised suicide rate in New Zealand in 2000 was 11.2 per 100,000, compared to 12.1 per 100,000 in 1990 (Ministry of Health, 2003, p. 3). The Ministry of Health Report (2003) states that in 2001 the suicide rate for 20–34 year olds varied between 21.2 and 25.3 per 100, 000. The Ministry of Health Report quotes that in 2000 the New Zealand suicide rate for males

was more than four times that of females (i.e., 18.7 : 4 per 100,000). Miller (1998) quoted the suicide rate for New Zealand Police in 1997 as 20.1 per 100,000, which he maintained was comparable to the rate for the general population for that time period. No more recent statistics could be obtained from the New Zealand Police; a formal request in July 2003 was made to the Human Resources department of the New Zealand Police (personal communication, 16<sup>th</sup> July 2003) and the reply was that no formal figures are kept by the New Zealand Police.

Further information can be gleaned from research in the military organisations, which share with Police Officers a very structured organisation, a strict chain of command, and a high possibility of job exposure to traumatic events. Historically, the New Zealand Police has been described as a quasi–military style bureaucratic organisation. This bureaucratic, almost military, type of police organisation is based on a system of administration involving organisation into bureaus, division of labour, and a hierarchy of authority which follows with the principles of an original architect of modern police, Sir Robert Peel, who founded the London Metropolitan Police in 1829 (Germann, Carlson & Thayer, 1978). The Peelian principles, especially those regarding organisation on military lines – proper selection and training of staff, centralisation, maintenance of records and discipline – are the basis of the quasi–military bureaucratic organisation and can be juxtaposed with the classical school of management to understand the management of the New Zealand Police. Thus, it can be said that the New Zealand Police are very similar in structure, organisation and administration to the other police forces world–wide whose organisation and structure are based on Peelian principles, such as the British, Irish and Scottish Police forces.

Apter et al.'s (1993) research on forty-three consecutive Israeli male suicides (18 to 21 years of age), which occurred during compulsory military service, used pre-induction assessment data, service records, and extensive post-mortem interviews with family and peers. Of the sample 53.5% would have met formal criteria for major depressive disorder; most cases, however, appeared recent and reactive to recent negative life events. Narcissistic and/or schizoid traits were also found to be common. Substance abuse was absent and antisocial personality disorder was rare (4.7%). Furthermore using the Diagnostic and Statistical Manual of Mental Disorders (4<sup>th</sup> ed.) diagnostic axes (American Psychiatric Association, 1994), in eight patients (18.6%) no Axis I diagnosis could be made and half of these also lacked any significant Axis II pathology. These findings, at partial variance with American studies, suggest a complex relationship between suicide and mental disorder. The striking failure of intensive screening and preventive measures that had been in place to prevent these suicides, highlights unresolved questions of aetiology and intervention. It suggests that suicide in police/military is less related to pathology such as depression than it is in non-police samples where it may be more reactive. Therefore, in the current study consideration was given to the concept that identification of rates of depression and hopelessness in relation to suicidal ideation may not be as useful as the presence of supports, (e.g., mentoring), especially in the current study.

## *Models of Occupational stress*

A number of theoretical health-based models have been proposed for occupational stress (Bhagat, 1983; Brief, Schuler, & Van Sell, 1981; Cooper & Marshall, 1976; Hendrix 1985; Ivancevich & Matteson, 1980). Components of these models include: stress and health related determinants (i.e., intra- and extra-organisational, and individual characteristics), job and life stress, psychological and physical outcomes, and organisational outcome factors.

When exploring the models of occupational stress it is clear that there is no best fit for all situations and all types of studies. Lewin's (1935) Person-Environment Fit Model outlined an objective discrepancy (misfit) between the individual desires/capabilities and what the job supplied, created stress within the individual. In this moderating perspective of the stress-strain model behaviour is a function of the person's interaction with their environment.

In 1987 Warr developed the Vitamin model which has many similarities to the Person-Environment Fit Model. Warr theorised that certain job characteristics may affect mental health in the same way that vitamins affect physical health. An absence or presence of job characteristics will impair or benefit employee mental health. If the job characteristic increases, this may produce a constant effect or a toxic effect resulting in impairment in mental health.

The Social Environment Model (ISR or Michigan Model) developed at the University of Michigan is basically a combination of a number of conceptual categories or variables rather than a research model/theory per se (French, Kahn, & Mann, 1962). This model includes objective environment, subjective environment, stress reactions or strains, illness, the person, and social support and the relationship

of these stress reactions or strains to occupational function. It has been criticised for its inability to be adequately operationalised, in that it has no clear theoretical perspective that leads to specific hypotheses. A second criticism is that stress reactions are grouped together whereas these reactions may occur at different times in the stressful situation. For example anxiety, high blood pressure, and turnover: anxiety occurs at the time of the stress, prolonged exposure to stress results in high blood pressure, and turnover may not be related to stress at all (Drenth et al., 1998).

Originally known as the Job Demand–Control (JD–C) Model it was extended by its author to the Demand Control Support Model (Karasek, 1979). Karasek postulated that the primary sources of stress relate to job demands and control of the work environment, where increased demands and decreased control result in strain reactions (Karasek, 1979). The Demand Control Support Model is similar to the current study as it is a mediational model where strains are a consequence of job demands, however it differs by including job control available to the employee as a variable.

#### *A model proposed for the current study*

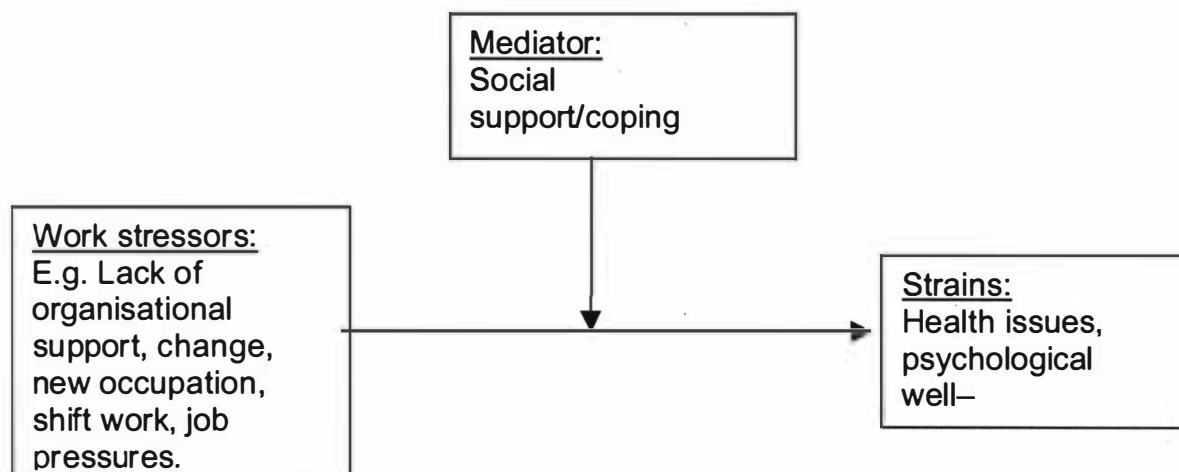
Although the evidence would mainly imply that there are numerous negative consequences of job stress, these consequences are thought to be mediated or buffered by factors such as coping and social support (Brief, Burke, George, Robinson, & Webster, 1988).

Therefore rather than an occupational stress model a social support model was chosen to consider the mediational link mentoring has between stress and strain. This suits an experimental design as it has a causal link, which is theoretically measurable.

As previously discussed (p. 9-11) social support models that have been commonly used to identify how social support modifies outcomes of stress include the direct effects (moderator), 'buffer' and indirect (mediator) models. The authors of the direct or main effects model suggest that social support exerts beneficial effects on psychological well-being regardless of the individual's level of stress (e.g. Kessler & Essex, 1982). Social resources are seen as a means to lessen the likelihood of symptom development (Norris & Murrell, 1984). In contrast to this the authors of the buffer model predict an interaction between levels of stress and social support. Quittner et al.'s (1990) third possible model – that of an indirect mediator model, propose social support functions as an intervening variable between the stressor and outcome.

A mediating variable is tested using the path-analytic model and functions to "account for the relation between the predictor and criterion" (Baron & Kenny, 1986, p.1176). Thus mediators describe *how* effects occur, rather than *when* certain effects will occur.

As the current researcher is investigating the extent to which mentoring will reduce occupational stress in New Zealand Police, it was proposed that mentoring would act as a social support in the stress-strain path model, mediating the impact of stress.



*Figure 2.* Social support as a mediator of stress at work based on a path model (adapted from Ivancevich & Matteson, 1980).

### *Mediators and Buffers to Occupational Stress*

A number of psychosocial factors including personal resources, social relationships, social supports and social influences, and coping behaviours have increasingly been found to affect stress and health and to buffer the relationships between stress and health (Israel et al., 1989). Authors of empirical studies of the relationship between occupational stress and psychological adjustment have increasingly emphasized the importance of coping strategies in reducing the negative effects of stress through buffering (e.g., Brief et al., 1988; Parkes, 1990). The mediating effects of commitment to an individual's position/occupation would have a positive impact on the experience of stress in that position, showing that it deserves consideration as a stress mediator along with the more widely investigated constructs of social support (e.g., LaRocco & Jones, 1978) and coping (e.g., Parkes, 1990).

As previously noted, the New Zealand Police were in the midst of organisational change in the 1990s and organisational change is a recognized source of stress (Kouzes & Posner 1995). Therefore research such as that of Begley and Czajka (1993) is of particular significance as it is relevant to the occupational stress due to organisational change of the current study. Begley and Czajka examined a period of organisational turmoil, testing the mediating effects of employees' organisational commitment on the stress–outcomes relationships. Begley and Czajka's research had some similarities to the current research in that they investigated intent to quit, work–related depression, work–related irritation and somatic complaints. Begley and Czajka found there was lower job satisfaction, higher intent to quit and fewer somatic complaints between the two times of the study. Specification of the effect showed that organisational commitment mediated the relationship of stress with residual job displeasure. This provides further support for the expectation that mentoring, acting as a social support and an aid to commitment, would be an effective mediator to stress during the organisational change that the New Zealand Police was undergoing.

Bowman and Stern (1995) stated that the focus on coping is of particular interest to counselling psychologists, who frequently help clients with relatively normal functioning respond to stressful circumstances and problems that they experience at work. These authors reported that research has indicated that the impact of occupational stress is so costly that they have looked at how to alleviate this impact by increasing utilisation of factors known to buffer the impact of stress. This has resulted in studies of how individual or a small number of events/factors can have an impact on occupational stress and how coping styles can alleviate the outcome of such

stress. Furthermore, the results of Bowman and Stern's study were similar to the results of Parasuraman and Cleek (1984), who found that avoidant types of coping are maladaptive in the occupational sphere, accentuating the affective distress connected to high work stress. Perhaps avoidance coping may be seen as reflecting aspects of neurotic or "immature defence" (Vaillant, 1976), which is inadequate for coping with the ongoing stress encountered in the occupational context. Although avoidance strategies may well be effective in responding to traumatic or acute stressors such as surgery (Wilson, 1981), by helping an individual through a difficult period with minimal distress, avoidance coping appears to be difficult to maintain in response to the routine and daily stressors encountered in the work setting.

As in the current study, a variety of researchers have considered stress-strain relationships and its causal link. Elsass and Veiga (1997) examined the relationship between job control and job strain. Elsass and Veiga found that control is inversely related to job strain, and strain increases as the discrepancy between actual and desired levels of job control increases. Evidence based research clearly links control over life events with health and well-being (Steptoe & Appels, 1989). Conversely, authors of research have associated low levels of control with increased levels of strain (Thompson, 1981), including negative outcomes such as depression (Seligman, 1975).

The majority of early work on occupational stress and coping was tied to perception of increased stress in the Western workplace and the generalisability of these findings to other cultures needed to be established. An example of replication of Western research in the East is a study by Siu (2002) which provided evidence of the generalisability of theories in organisational psychology across cultures by examining occupational stressors and well-being for blue- and white-collar workers from

Chinese and Hong Kong samples. Siu demonstrated that occupational stressors play a significant role in determining job satisfaction, and mental and physical well-being. Siu also showed that organisational commitment and well-being are positively related. A number of hierarchical regression analyses led Siu to confirm that the moderating effects of organisational commitment on stress outcomes that are evidenced in Western societies are generalisable to other samples.

As is evident from this review, occupational stress has been defined in a variety of ways, has numerous consequences, and a number of ameliorating factors. Within the literature a virtual truism is that the negative impact of occupational stress is high both to the employer in terms of absences and morale, and to the employee in terms of stress-related illness (Kearns, 1986 as cited in Fletcher, 1988). Occupational stress has been related to a number of contributing factors including workload, role ambiguity, shift work (Fox et al., 1993) and reduced control/decision making (Clegg, 2001).

Although the foregoing general discussion points towards factors likely to increase experiences of occupational stress across a variety of occupations, some professions (such as policing) are subject to additional sources of occupational stress. The focus of the current study is on the use of mentors as a means of reducing the experiences of occupational stress in policing. Thus the model represented in Figures 1 and 2 (p.15 and 37 respectively) is now presented as interpreted in the current study as Figure 3 (p. 41).

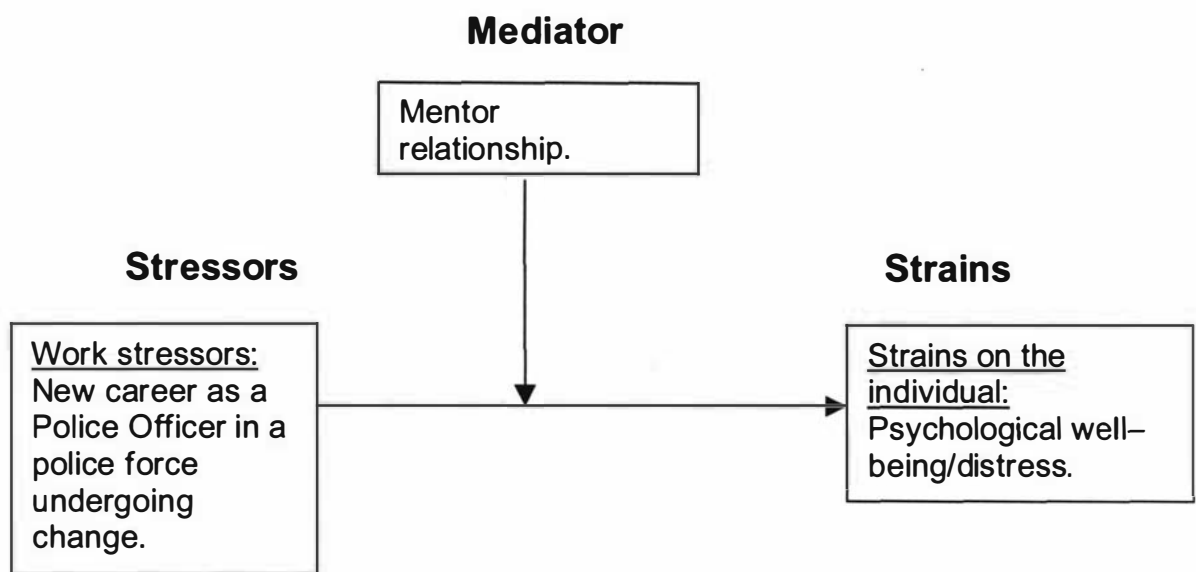


Figure 3. The Mediating model of stress at work used in the current study (based on a path model – adapted from Ivancevich & Matteson, 1980).

### *Mentoring as a mediator.*

The authors of research on stress and policing have been concerned not only with identifying areas of police work that result in occupational stress as reviewed above, but also on factors that buffer and mediate its effects (Burgin, 1975). Support can be found in the literature for the view that, as with other samples, social supports help reduce “police stress” by enhancing the Officer’s coping strategies (Cullen, Link, Travis, & Terrance, 1983). For example, supervisory support has been found to mitigate work stress in policing (Cullen et al., 1983). Furthermore Stephens (1996) identified the importance of support from peers and family in the mediation of the impact of work-related traumatic event exposure in her study on New Zealand Police. This fits with the theories which led to the use of the mediational model used in the current study.

The definitions, models, consequences and ameliorating factors which may have an impact on policing stress are numerous and complex. It is now appropriate to examine those means by which occupational stress within policing has been addressed. The following section will include mentoring and the programmes, which have been implemented in an attempt to reduce this stress. This project was designed to explore the mediating effects of mentoring on occupational stress at an individual level.

## CHAPTER 2

### Mentoring

Mentoring has been defined in a number of ways. The American Heritage® Dictionary of the English Language (1992) has provided a useful summary of its derivation and present usage:

The word *mentor* is an example of the way in which the great works of literature live on without our knowing it. The word has recently gained currency in the professional world, where it is thought to be a good idea to have a mentor, a wise and trusted counsellor, guiding one's career, preferably from the upper reaches of the organisation. We owe this word to the more heroic age of Homer, in whose *Odyssey* Mentor is the trusted friend of Odysseus left in charge of the household during Odysseus's absence. More important for our usage of the word mentor, Athena disguised as Mentor guides Odysseus's son Telemachus in his search for his father. Similarly, the author Fénelon in his romance *Télémaque* (1699) emphasised Mentor as a character who was a trusted advisor. From these early beginnings, the word mentor became a common noun meaning 'wise counsellor', first recorded in 1750. Mentor is an appropriate name for such a person because it probably meant 'adviser' in Greek and comes from the Indo-European root *men-1*, meaning 'to think'.

Mentoring means many things to many people – a traditional dictionary definition is: mentor (mèn'tôr', -ter) *noun* 1. A wise and trusted counsellor or teacher. 2. Mentor. *Greek Mythology*. Odysseus's trusted counsellor, under whose disguise Athena became the guardian and teacher of Telemachus (American Heritage® Dictionary of the English Language, 1992). Closely linked to mentor is the term protégé or the person whose welfare, training, or career is promoted by an influential person (American Heritage® Dictionary of the English Language, 1992). For the purposes of the current study a less traditional definition was chosen – “Mentors are people who, through their actions and work help others to achieve their potential” (Shea, 1992).

Of relevance to the current study is the definition of mentorship. The American Heritage® Dictionary of the English Language (1992) provides the following definition

... the relationship between a more experienced person and a less experienced person established for the primary purpose of developing the skills and abilities of the less experienced person. In this context, a mentor is a more experienced person in a relationship established for the primary purpose of coaching, guiding, and sharing knowledge with a protégé, whilst a protégé is a less experienced person in a relationship established for the primary purpose of learning new skills and abilities from a mentor.

Many definitions can be found in the literature on mentoring. These definitions lie along a continuum from coaching to a buddy system. Kram (1985, 1986) has defined mentoring within an organisational context as covering a broad range of

developmental relationships between juniors and seniors and among peers. In defining this range of relationships, the role of the mentor must be differentiated from other similar roles such as those of coaches, counsellors, and supervisors. As this project includes studying the mentoring relationship it is useful to consider its closer allies which are coaching, counselling, teaching, supervisory and peer/collegial relationships. To understand the components that are important to mentoring it is appropriate to consider how these relationships differ from mentoring and how they are the same, and how relationships vary from role to role and time to time.

### *Coaching versus Mentoring versus Counselling*

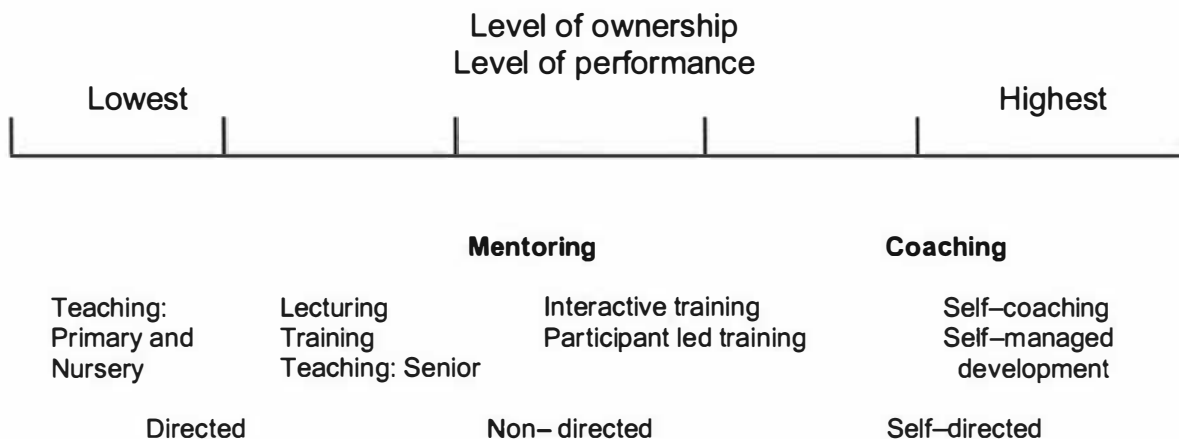
Relationships within the work environment vary from peer or collegial to supervisory; they can be hierarchical or have a more flattened structure. The type of relationship varies between friends, coaches, supervisor, associates and mentorship, to name a few.

In most industrial relationships the aim of a coach is to benefit the organisation and to motivate employees to want to do something that achieves the goal of the organisation. MacLennan (1995) points out that skilful mentoring and coaching both help to inspire a willingness to achieve the needs of the organisation, sharing such characteristics and skills as: enthusiasm, commitment, productivity, loyalty, flexibility, and persistence, responsive crisis management and conscientious crisis prevention, team work, mutual support, creativity, cooperation, managed risk taking, perpetual self generation, staff ownership of problems and responsibility for solutions, adaptability and responsiveness to change, vision, purpose, and appropriate staff development.

MacLennan (1995) identified a coach as someone available to the individual to learn *with*, where coaching is the process of helping the individual unlock their natural ability, and identifying and removing internal barriers to achievement. Coaching is not teaching, instruction, or training. In contrast MacLennan identified a mentor as someone available for the individual to learn *from*. Mentoring is the process of a more senior person being available to a junior to form a non-specified developmental relationship, to provide information, to be a role model for the purposes of emulation, to identify what the organisation/department/company expects, to show the protégé how the organisation works, to ensure cultural compliance, to guide the protégé through a phase of operational, professional or vocational qualification, to provide feedback and appraisal, and to teach all the relevant facts that enable the junior individual to perform effectively in an organisation.

One might conclude from the above that coaching and mentoring differ only in that mentoring involves teaching while coaching fulfils more of a supportive function. However, MacLennan (1995) further clarified the difference by identifying mentors as able to fulfil their role unwittingly or unwillingly, as the mentor acts as a role model. A coach, by comparison, could not be unwitting and is unlikely to coach if unwilling. A mentor does not coach unless he/she deliberately adopts coaching skills. MacLennan described mentors as a resource and coaches as those who help the performer learn to achieve more. Further, he saw a mentor as able to fulfil their role with minimal training, teaching and basic management skills, whereas an effective coach must have the knowledge, technique and skill to help the performer achieve without directing. Who defines where on this continuum the relationship lies? MacLennan believed the organisation clarifies the relationship by defining the

parameters of the expected role. Figure 4 presents a useful diagram to explain MacLennan's model of these relationships.



*Figure 4.* MacLennan's (1995) coaching continuum

As can be seen in Figure 4 teaching is at the directed end of the continuum, where level of ownership and performance expectation are lowest. Moving through interactive training, mentoring is seen as having moderate ownership and performance expectations in relation to the participant. At the highest level of ownership in relation to the individual, which is self-directed performance, coaching is considered to be the relevant mode of personal development. The current study lies within this context (of interactive training) with the New Zealand Police management perceiving mentoring as a means of introducing staff to a new career and organisational culture.

Minor (1989) provided an additional distinction between coaching and counselling, where counselling within an organisational context is a supportive process by a manager to help an employee define and work through personal problems that affect job performance. In contrast, coaching was defined by Minor as: a directive process by a manager, to train and orient an employee to the realities of the workplace,

and to help the employee remove barriers to optimum work performance. The difference was further clarified by Minor: coaching is utilised when there is a lack of knowledge about job responsibilities, whereas a counsellor is utilised when the problem is due to a personal problem of the employee. Minor stated that as a truism of most effective interpersonal relationships “An effective coach or counsellor listens more than they talk” (p. 17).

The importance of separating definitions of mentoring and of differentiating mentors from similar roles such as coach and counsellor, has had an impact on how mentoring was conceptualised in the current study (i.e., as a psychosocial support). What are those factors that may contribute to positive mentoring outcomes?

### *Characteristics of effective mentoring*

Unfortunately, little research has been published to indicate which specific factors contribute to positive mentoring outcomes. Before considering the available literature it is useful to examine the existing literature on beneficial aspects of similar relationships such as the therapeutic alliance. When examining factors that contribute to the success of the therapeutic relationship Bergin and Garfield (1994) summarised these factors into support, learning, and action factors.

Bergin and Garfield (1994) chose these categories in their interpretation of the development of the therapeutic alliance. The development of an alliance is presumed by the authors to move from the supportive features (for example: therapist warmth and reassurance), which initiate the relationship, through to beliefs and attitudes in the learning factors. During this phase of the relationship the therapist teaches the client new skills with which to approach the problems (e.g., advice, insight), which precedes

the therapist encouraging action, including the appropriation of these new skills on the part of the patient (e.g., mastery effects and success).

It becomes apparent that in any relationship there are many factors that may be associated with a positive outcome, with many facets that are common to mentoring, coaching, and counselling. When considering factors that are important to incorporate into a mentor training package, the sheer number of factors identified, make it difficult to determine which factors are useful, and to what extent these factors are operating to produce a positive outcome for a particular relationship. Further, when looking into experiential therapies Bergin and Garfield (1994) identified a strong link between a positive, productive therapeutic or working alliance and outcome. Bergin and Garfield by citing a number of studies (i.e., Adler, 1988; Greenberg & Adler, 1989, Sachse, 1991) concluded that the best predictor of outcome is the therapeutic alliance. This concept may explain the success or otherwise of mentor relationships.

The literature on occupational stress points to the buffering and mediating effects of social support. One of the main objectives of mentoring is to improve social support and performance through empowerment and support (Shea, 1992). In this, the aim of the mentor relationship is to provide the protégé(e) with a person who they can trust, who gives sound advice, who works with the protégé(e) to solve problems, who helps the protégé stay up to date with tasks by encouragement and sharing their achievements, who advises the protégé(e) as to where to find information, while also providing the knowledge from experience. For example, Daniels and Guppy (1997) indicated that certain aspects of affective well-being are positively associated with social support. By providing this support the mentor allows the protégé(e) to perform better and become accustomed to the organisational culture more quickly. In this

context the mentor does not have to know everything and the protégé(e) does not have to know everything either. It is a joint journey of discovery.

MacLennan (1995) identified mentors as more necessary in the early development of the individual's career, and considered a mentor in the more traditional role of teacher/scholar. However, other authors such as Shea (1992, 1995) saw a mentor as fulfilling a wider role – as working with the protégé(e) to develop their potential. When looking at the literature and research in the area, the overlap between coach and mentor and where on the continuum a mentor/coach fits, varies according to the definition used. Shea (1992) identified key factors of being a successful mentor as: someone who through modelling and support helps others achieve their potential, or a person who has a profound effect on another or on their life. She further identified mentoring as an investment in others. Shea also put forward the idea that by being an empowering mentor the mentor respects the uniqueness of the individual and strives to enhance their unique strengths. Also, she identified that effective mentors tend to focus on the response of the protégé(e) to the help provided rather than how the help was provided. Shea believes that the best mentors are those people who assume that they and their protégé(e)s are in a lifelong journey of self-development.

Through his literature review MacLennan (1995) that motivation is another important factor in successful mentoring. Some people are mainly internally motivated (e.g., “I did a good job there I will do that again”); others externally (e.g., “You did a good job there” – I’ve been given a pat on the back – I will do that again). Motivation is as unique as fingerprints, however there are factors that influence motivation. Motivation can be voluntary (personal choice of what motivates you),

external or environmental (light, heat, fair pay, good work environment), involuntary (breathing, food, shelter, warmth and survival), and internal or self-determined (earnings of the entrepreneur). Thus it is important for both the mentor and protégé(e) to be able to identify their motivation so that the correct relationship style can be fostered (MacLennan, 1995).

### *The Current Situation*

Critical examination of relevant literature includes many factors in relation to stress and its mediators. This exploration of relevant literature has included stress, occupational stress, stress in police and similar occupations, models of stress and how they may or may not apply. The origin of this project has been considered, along with the organisational constraints in its planning and a recent suicide in the New Zealand Police. The impact of these factors on the project's inception and planning was also examined. The model chosen from the social support literature on stress was helpful in clarifying the goals of this project but has its limitations when compared to Hart and Wearing's (1996) more complex structural equation model. The current study was designed to give a starting point for mentoring to be introduced and to identify areas from this study for future direction. It was a means of implementing a cost effective stress reduction strategy into a system that had limited strategies in place, at a time of organisational change.

Thus far, this review includes some of the variety of roles and definitions for mentors that abound in the literature. It is important in any project or organisation that the role is clearly defined. In this study the word mentor is used in a less traditional sense than MacLennan (1995) describes, tending more toward Shea's (1992) definition. However, within the context of MacLennan's role definition, mentoring in

the current study's context was used to support induction and general development of a Probationary Constable during their initial six months as a Police Officer. It is recognised that mentoring is usually thought of in terms of career development. The establishment of a mentoring relationship can be a key factor in the career development process (Dreher & Ash, 1990) as well as personal growth (Shea, 1992, 1995; KPMG, 1995). Further, career counselling is seen by KPMG (1995) as an important part of career development. Career path is clarified by a mentor, thus improving the career path within an organisation for any individual (KPMG, 1995). However career mentoring is outside the scope of the current study. The author of the current study defines a mentor as a peer support person who, through a psychosocial style of support, can help to smooth the transition of the new employee into the New Zealand Police.

### *Formal versus informal mentoring*

Various studies have been carried out to investigate formal and informal mentor relationships. Stave's (2001) study on the effects of type of mentorship on job outcomes for graduates, as moderated by protégé(e) and mentor characteristics, examined formal (two types – protégé(e) chooses mentor [FPC] and organisation chooses mentor [FOC]), informal, and no mentor. Stave found that job satisfaction was highest in informal mentor relationships, followed by FPC, FOC, and also no mentoring relationships. Ragins, Cotton, and Miller (2000) also considered support and job satisfaction through formal and informal mentor relationships. They investigated the perceived effectiveness of the mentor relationship. Ragins et al. (2000) found that satisfaction with a mentoring relationship had a stronger impact on attitudes than the presence of a mentor, whether the relationship was formal or

informal, or the design of a formal mentoring programme. Ragins et al. concluded that “a formal programme is only as good as the mentor it produces” (p 119). Therefore, based on the literature, it was thought that providing training based on problem-solving techniques that a formal mentor programme would support the needs of the protégé(e)s (Ragins, et al., 2000; Sears et al., 2000; Staves, 2001)

Barr (2000) also investigated formal and informal mentoring. His study on relationship types found no difference in protégé benefits between the two types of mentor relationship. Allen, McManus, and Russell’s (1999) results indicated that formal mentoring provided more psychosocial support than informal mentoring. Further, in this study socialisation was divided into four categories – politics, people, organisation and performance. Although both psychosocial and career mentoring were positively correlated with general socialisation, psychosocial mentoring related to politics and performance proficiency. Allen et al. (1999) also found that although mentoring was related to overall socialisation, and overall socialisation was related to reduced work-induced stress, socialisation did not mediate the relationship between mentoring and work-induced stress. Allen et al. concluded that their results supported the use of formal mentor programmes for successful socialisation of newcomers. Thus it was hypothesised that the current study that included a formal mentoring programme would be useful in the socialisation of Probationary Constables into the New Zealand Police.

Some researchers have found that satisfaction with the mentoring relationship had a stronger impact on attitudes than the presence of a mentor, the design of the mentoring programme, or whether formal or informal mentoring took place (Ragins, et al., 2000). Others considered rewards both tangible and intangible; for example in

Healy's (1990) review on mentoring relationships Ruskus (1988) was cited as a study that showed effective rewards for mentoring include money, improved collegiality, leadership and positive sense of efficacy.

Haggis (1998) investigated psychosocial support, career support mentors and supportive peers for a professional sample of MBA students and alumni. Participants were classified as informally mentored, formally mentored, or non-mentored, as well as with or without a supportive peer. Haggis found no differences between informal protégé(e)s' and formal protégé(e)s' reports of functions provided to them by their mentors or their peers. There were differences in mentored and non-mentored individuals' reports of peer functions. Both informal protégé(e)s and formal protégé(e)s reported more psychosocial support from their peers than those without mentors. Chao and Walz (1992) found no difference between formal and informal mentor relations for psychosocial support. However, these authors found that socialisation was higher in those mentored than among the non-mentored.

Further, perception of the mentor relationship has been investigated in the past. Dalby Ellison (1998) maintained that developmental (mentor) relationships have leverage and value, and that these relationships influence the effectiveness of organisations and the work performance and psychological well-being of individuals. However, Dalby Ellison indicated that protégé(e)s and mentors in the same relationships did not always agree on the amount of support provided by the relationship. Dalby Ellison documented that researchers need to be cautious when drawing conclusions from their data because mentors and protégé(e)s in the same relationship can have different perspectives about the relationship.

As can be seen studies of formal versus informal mentoring versus psychosocial support have various outcomes. Formal mentoring appears to provide more psychosocial benefits whereas informal mentoring appears to have the most benefits overall.

McDougall and Beattie (1997) reported that the type of learning relationship found in peer mentoring, which is based on learning and development between two peers, is particularly appropriate to organisational and social transformation. All participants in this study found peer mentoring beneficial.

The current formal programme based on peer mentoring and psychosocial models fits within the findings of the current literature and leads me to believe there will be positive effects of mentoring with this approach.

### *Mentoring and organisational change*

In their 1990 study, Cook, Campbell, and Peracchio, considered how stable or turbulent types of organisational environment moderated the relationships of commitment and stress with each other or with outcomes. The primary managerial implication of these findings is that organisational commitment is an effective buffer to the stress of organisational turmoil. Therefore from the employer side, organisations may benefit from creating situations that enable their employees to feel committed. From the employee side, individuals may benefit from seeking opportunities to enhance their sense of commitment. In summary, Cook et al. supported the efficacy of organisational commitment in helping employees adjust to the strain of a divisional consolidation. Thus considering the changes that the New Zealand Police were undergoing at the time of the current study it was hypothesised

such a mentoring programme would support commitment and adjustment to the strain of the changes.

### *Mentoring in the Police*

Teamwork is fundamental in the Police, but when adding a new team member there is often little time for that member to come up to speed as outputs are measured by the team and a more gradual 'ramp up' time is not always available. Adding new members to established teams disturbs the status quo – from the team's flow of production to its balance of personalities (Hart, 1995). Hart identified mentoring as an effective means of integrating members into a team, whereby the mentor essentially takes 'ownership' of the success of the new member, creating a 'buy-in' from someone within the existing team.

Chua (1992) in one of the few reports of police mentoring described the Singapore model (Chua, 1992) – a system in which the mentor is a more senior Officer and is provided as a long term constant mentor, only for those new recruits identified as 'high fliers'. This system focuses on potential-driven promotion<sup>13</sup>, where the importance of a mentor is underscored by planning for potential appraisal and succession. This mentoring is supplemented not only by individual performance appraisals, but also by panel discussions on those individuals "worth" mentoring.

In addition to the above, there is increasing evidence that the establishment of mentoring programmes has beneficial impact on occupational stress within police organisations. For example Appelbaum, Ritchie, and Shapiro (1994) reported a relationship between mentoring and job satisfaction, in that mentoring fosters less

absenteeism, turnover and career plateauing. Fagan and Ayers (1985) believed that, despite lack of research in the area, mentoring is as prevalent among the police as in other professions. These authors found that mentoring correlated with job satisfaction, mentors were purported to have increased new recruits' self confidence, as well as aided in the technical aspects of police work. Those who had a definite mentor were more satisfied with their work than those who had no mentor or diffuse mentoring. It was recommended that police departments should facilitate informal mentoring or develop sound Field Officer training programmes, where trainees are assigned to suitable Field Training Officers (mentors) and provide opportunities for Field Training Officers to interact socially with new recruits. When considering the characteristics of effective field training programmes it is important to consider incentives. For example, in a study by Johnson (1992) in San Jose, difficulties arose with a monetary reward system, where without consultation and without examination of other motivations, a monetary incentive led to disillusionment, changes in direction and focus, and a lack of cooperation among participants.

Therefore, studies such as Johnson (1992) and Fagan and Ayers (1985) would indicate that to help reduce the impact of strains and stressors, a formal psychosocial mentor relationship could be used as part of the induction process for people new to the police organisation.

Having reviewed the specific areas to be investigated by the author of the current research in the context of the literature, mentoring itself can now be explored more broadly, along with how the current study and its results could fit within this broader topic.

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<sup>13</sup> Potential driven promotion– identification of “high fliers’ and their quick promotion within the structure of the organisation (Chua, 1992).

### *Mentoring, Stress and Policing.*

Brown & Campbell (1990) point to stress on Police Officers due to their occupation. Stress has been explored in terms of stressors and 'felt stress' – such as distress, anxiety, depression, social dysfunction and somatic disturbance (Brown & Campbell, 1990). Brown and Campbell found that the amount of reported 'felt stress' is higher for the lower ranks (i.e., Constable, Sergeant) than for those of the ranks of Inspector or above.

Beutler et al. (1988) found that there is a negative change in the psychological functioning of police over time. They also found that addictive personality behaviour and vulnerabilities increased in the first two years, and this trend continued into the four-year period. The negative change puts the police at risk of stress-related physical complaints and substance abuse. These changes are likely to impact on their well-being in general and also lead to detrimental performance as police officers as well.

Siegel and Reinstein (2001) found that during times of stress and organisational turmoil (such as mergers and restructuring) mentoring was a successful mediator for stress. They stated that the psychosocial aspect of mentoring might help employees to cope better with stressful conditions. The author of the current study aimed to explore this hypothesis. In a study with New Zealand Police, Stephens and Long (2000) found that communication was a buffer to work-related stress, it was therefore theorised that in the current study enhanced communication through mentoring was likely to be useful to Police Officers. Stephens and Long (2000) and Sears et al.'s (2000) research helped to focus the content of the training package in relation to style of mentoring.

### *Mentoring and the police – the intangible.....*

Fagan (1985) studied the perception of a Field Training Officer programme which is similar to a mentor programme, with the exception that the training officer is just that, a trainer. However, the trainees perceived the relationship as peer-like and thought that it could be seen as a mentor-like position. Fagan found that most protégé(e)s considered the relationship fulfilling and useful. Fagan and Walter (1982) found that the frequency of mentor relationships in teachers and police was similar to that of nurses. Also there was a positive relationship between mentoring and job satisfaction, and having a mentor was significantly related to being a mentor. In other words, if an individual was mentored, then the individual was more likely to mentor (Fagan & Walter, 1982). Ensher, Thomas, and Murphy (2001) also supported the finding of more job satisfaction for those who are mentored.

### *The Current Study*

Within the present context, mentoring was initiated as a means of introducing Probationary Constables to the New Zealand Police organisation in the Auckland region, and also as a means of dealing with difficulties experienced by senior staff. The purpose of the current study was to look at support of staff new to the organisation through a mentoring programme and to also explore the impact of mentoring on more senior staff who chose to mentor. As such, the current study included the evaluation of initiating a formal mentor programme “The Field Support Officers Programme” within the New Zealand Police.

At the time that the current study was approved, there were no formal mentoring or buddy systems established in the New Zealand Police, though, historically, there have been attempts at implementing both formal and informal mentoring systems. Enquiries made with the New Zealand Police revealed anecdotal

evidence of previous mentoring schemes. The police officers approached reported variable success of these schemes and there was no documented means to follow the process or to find out what happened to these schemes. The police wished to start a formal system where mentors would be selected, trained, and matched with a protégé(e) – a buddy system between peers.

For the scope of the project it was important that the mentor had the benefit of experience in the job but had not been promoted to a position which might intimidate the protégé(e), therefore only police personnel of or below the rank of Sergeant or its equivalent were asked to participate as mentors.

Areas to be investigated by the current study have been previously outlined and these six areas (psychological well-being, distress, depression, posttraumatic stress, intent to quit and hopelessness), which can be related to the mediating variable mentoring, will now be further explored. As noted earlier, depression and hopelessness are noted predictors of suicide. Post traumatic stress disorder is likely in Police Officers and one of its symptoms is a likely confound to the current research due to flat affect. Distress and well-being are affected by stress and intent to quit can be an outcome of occupational stress. This justifies the inclusion of these factors and their consideration in relation to the mediating variable of mentoring in this study.

### *Mentoring and hopelessness*

In his 1995 paper on the police, Turvey proposed that hopelessness was the most motivating contributor to suicidal ideation. Turvey stated that “when a police officer commits suicide it is most certainly an expression of hopelessness within the perspective defined by the police culture”(p. 4). Although this opinion is interesting it is based on anecdotal information and reported case studies.

Keating, Tomishima, Foster, and Alessandri's (2002) found no difference on measures used for hopelessness (measured on the Hopelessness Scale for Children), between those mentored and those without mentors.

### *Mentoring and well-being*

In relation to psychological well-being and mentoring Twomey (1990) examined two preventive social support interventions in a peer mentor programme (similar in context to the current study). She considered effects of similarity between mentor and protégé(e) and secondly, effects on performance and psychological well-being. There was no change in psychological well-being for the groups, however the participants experienced an increase in quality of life as a function of effort put into the programme.

### *Mentoring and distress*

Mears (2002) focused on social support rather than on a mentor relationship. Mears explored college women's connection to the community and peers, and found that a lack of connection (feeling of belonging) to the college community was strongly correlated with all measures of psychological distress. In some instances this relationship was significantly stronger than the relationship between connection to a best friend (peer support) and psychological distress. Mears indicates the importance of peer support and a feeling of belonging, which may bring about a reduction in psychological distress. In the current study, mentoring was thought to enhance this feeling of belonging and increase social support, thus, the expected result was a reduction in distress in those mentored.

### *Mentoring and depression*

Research on the effects of mentoring on depression has had mixed results. Some researchers support the idea that mentoring has a positive effect on decreasing depression. For example in relation to natural mentors Rhodes, Ebert, and Fischer's (1992) found that those with mentors reported lower levels of depression than those without. Queen (1994) considered meeting the affective needs of at-risk adolescents (13–19 year olds) by a teacher or mentor who provided a formal relationship with the student in a group setting for 30 minutes daily. After one semester there had been: a drop in alcohol and drug use, an increase in self-esteem, a drop in those experiencing depression, and all students who had previously felt socially isolated no longer felt that way.

Hibbard et al. (2002) support the potential for mentor relationships to reduce depression levels. Hibbard et al. found that community-based peer support (mentoring) was useful for individuals and their family members following traumatic brain injury (TBI). The positive aspects were increasing their knowledge of TBI, enhancing their overall quality of life, improving their general outlook, and enhancing their ability to cope with depression post TBI. In contrast Zimmerman, Bingenheimer, and Notaro (2002), who considered natural mentors and their role in the lives of adolescents, found that natural mentors had no apparent effect on anxiety or depression.

### *Mentoring and intent to quit*

Burke and McKeen (1996) examined mentoring relationships engaged in by managerial and professional women. These authors found that women with male and female mentors generally reported similar experiences. Burke and Keen found a trend

toward significance for women with female mentors who reported receiving more psychosocial support functions, and had significantly greater intention to quit their organisations.

### *Mentoring and posttraumatic stress symptoms*

In an unpublished manuscript on the effects of life stress and social support on PTSD symptoms in veterans, Gallagher (1999) found that stress factors, including current stressful life events and exposure to combat, are determinants of PTSD symptoms in veterans. In comparison, social support did not provide significant predictors for level of symptoms in the sample.

The overall objective of the current study was to implement a formal mentoring programme within the New Zealand Police organisation and to analyse its effects on both mentors' and protégé(e)s' functioning in terms of post traumatic symptoms, intent to quit, hopelessness, depression, psychological distress, and psychological well-being. As can be seen from this review of the six variables of interest in relation to mentoring, research is extremely limited in these areas and the current study is designed to advance an understanding of mentoring.

### *Hypotheses*

It was hypothesised that those who were mentored (protégé(e)s) and those who mentored (mentors) would have better psychological well-being as measured by the Mental Health Inventory, defined as having higher scores of well-being, and being under less stress or better able to cope with stress. They would therefore be less distressed (e.g. Mears 2002; Sears et al., 2000), than those who did not mentor or were not mentored, as defined by lowered scores on distress measures of the Hopkins Symptom Checklist and reduced Posttraumatic Stress Disorder symptoms (e.g., Carlier et al., 1997) as measured by lowered scores on the Civilian Mississippi Traumatic Stress. Mentors and protégé(e)s would also be less depressed (e.g. Sears et al., 2000; Rhodes et al., 1992) than the control groups as defined by lowered scores on the depression measure – (Beck Depression Inventory). Mentors and protégé(e)s would show less hopelessness ideation as defined by lowered scores on the Beck Hopelessness Scale, leading to a lower indicated risk of suicide (Kaplan et al., 2002). Mentors and protégé(e)s would also have a lowered intent to quit than controls as measured on the Intent to Quit scale.

Main hypotheses made in relation to these objectives are detailed as follows:

- (1) Those who are a) mentored or b) act as mentors, will have higher well-being scores and lower: hopelessness scores, distress scores, depression scores, levels of PTSD symptomatology as measured on a PTSD scale, and intent to quit compared to those who do not mentor or are not mentored;

- (2) Mentors and protégé(e)s will derive positive benefits from their relationship as defined by a second questionnaire concerning perceived values of mentoring.

## CHAPTER 3

### Method

#### *General*

The aim of the current study was to consider mentoring as a mediator of psychological well-being<sup>14</sup> of Probationary Constables in the New Zealand Police. This occurred within the context of an induction process in which mentoring was introduced for Probationary Constables within the New Zealand Police. Mentors and protégé(e)s were assigned to groups using a Solomon Four Group design (as outlined in Table 3, p. 91), when the Probationary Constables attended their first day of duty in Auckland, at the end of their initial training at the Royal New Zealand Police College.

#### *Participants*

All participants in this research project were drawn from Region One of the New Zealand Police. Of the 180 protégé(e)s and 74 mentors who agreed to participate in the current study 105 protégé(e)s (29 female, 76 male) and 64 mentors (16 female, 48 male), completed the questionnaires. Region One covers the area from just South of the Bombay Hills to the northern tip of the North Island.

Mentors consisted of any person of or below the rank of Sergeant or its equivalent, employed by the New Zealand Police, who wished to take on the role of mentor for Probationary Constables who came into the region. Training for mentors was offered to the whole of the Region. Due to practical limitations and the fact that most Probationary Constables were assigned to a station in the greater Auckland area, this became the focused area of the research. However, two Probationary Constables who took part in this research were from Whangarei (n=2), which is a small city 130 kilometres north of Auckland.

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<sup>14</sup> Psychological Well-being – positive mental health states e.g., feeling cheerful, interest in and enjoyment of life. Measured by general positive affect and emotional ties. (Viet & Ware, 1983).

Table 1

*Description of the mentors and protégés in each of the four groups.*

Demographics	Mentor				Protégé			
	1 (n=38)	2 (n=2)	3 (n=20)	4 (n=4)	1 (n=31)	2 (n=40)	3 (n=16)	4 (n=18)
<b>Group number</b> (n = Number of participants)								
<b>Age (years)</b>								
Mean	36.97	33.00	33.55	34.25	29.26	28.60	29.31	28.00
(SD)	(5.77)	(2.83)	(7.46)	(3.20)	(6.21)	(5.81)	(6.20)	(4.91)
<b>Gender</b>								
male	30	1	15	2	24	28	9	15
female	8	1	5	2	7	12	7	3
<b>Sworn</b>								
Yes	38	2	18	3	31	40	16	18
No	0	0	2	1	0	0	0	0
<b>Frontline</b>								
Yes	25	1	16	3	28	39	15	16
No	13	1	4	1	2	1	1	2
<b>Marital Status</b>								
Never married	3	0	5	1	12	17	5	6
Married/de facto	32	2	14	3	14	18	6	10
Divorced/separated	3	0	1	0	5	4	5	2
Other	0	0	0	0	0	1	0	0
<b>Ethnicity</b>								
Maori	5	2	5	2	2	5	2	2
Pakeha/European	33	0	13	2	25	28	13	13
Pacific Islander	0	0	1	0	1	3	1	3
Other	0	0	1	0	3	4	0	0
<b>Service 1 (years)</b>								
Mean (SD)	13.95 (7.72)	12.5 (3.54)	11.42 (7.93)	3.50 (3.32)	1	1	1	1
<b>Service 2 (years)</b>								
Mean (SD)	13.03 (8.18)	12.5 (3.54)	8.82 (7.66)	3.50 (3.32)	1	1	1	1
<b>Time in Auckland (years)</b>								
Mean (SD)	25.46 (16.46)	3.5 (3.54)	19.93 (16.87)	14.00 (13.78)	16.95 (15.15)	16.93 (14.27)	15.56 (14.79)	20.34 (13.52)
<b>Qualifications</b>								
No school qualifications	0	0	1	0	0	1	0	1
School Certificate	10	2	6	0	12	11	5	4
UE	19	0	5	3	6	9	4	7
Trade/diploma	7	0	6	1	8	8	5	4
University degree	2	0	2	0	5	11	2	5

*Note.* School certificate is the qualification sat at fifth form level, which is after 10 years of schooling. UE - University Entrance is an exam sat in the sixth form and allows matriculation to University after year 11. Years service 1 is service for the New Zealand Police or traffic service and years service 2 was service for the New Zealand Police alone.

Demographic and other descriptive information about mentors and protégé(e)s in each of the four groups is presented in Table 1 (P.67). These demographics of age and sex ratios reflected the overall demography of the New Zealand Police at this time (Miller, 1998).

In addition to the Combined Measures Questionnaire (see Appendix A) distributed at various times during the study, the Mentor Relationship Questionnaire was distributed at time 3 (post-test) to groups 1 and 3. The Mentor Relationship Questionnaire consisted of open-ended questions designed to tap perceptions of the mentor-protégé(e) relationship itself from each participant's perspective (see Appendices B and C).

### *Measures*

Participants were asked to complete the Combined Measures Questionnaire (Appendix A) at each appropriate assessment period. This questionnaire consisted of a combination of measures for depressive symptoms, psychological well-being, psychological distress, hopelessness, Posttraumatic Stress Disorder (PTSD) and Intent to Quit. In this longitudinal study the Demographic Questionnaire (Appendix D), and the Combined Measures Questionnaire (Appendix A) were distributed at four different times in accordance with the experimental design and group allocation (as outlined in the Design section see Tables 3 & 5, pp. 91 & 95, respectively). The Mentor Relationship Questionnaire (Appendices B and C) was distributed once at time 3, to groups 1 and 3.

### *Biographical information*

Gender, age, ethnicity, education, marital status, years of service, and years of service within the Police were collated from the data collected from the Demographic Questionnaire (see Appendix D). Information was collected on both years of service and years of service in the Police so as to differentiate between those who had become Police due to the 1992 amalgamation (TSS and NZ Police) and those who had always been Police. Answers were provided in spaces, check boxes or yes/no responses. A detailed summary of responses is provided in Table 1 (p. 67).

### *Combined Measures Questionnaire (Appendix A)*

The Combined Measures Questionnaire consists of a combination of the following measures: Beck Depression Inventory (BDI), Beck Hopelessness Scale (BHS), Mental Health Inventory (MHI), Hopkins Symptoms Checklist – 21 (HSCL-21), Intent to Quit (ITQ), and Civilian Mississippi Trauma Scale (CMTS).

#### *Beck Depression Inventory (BDI; Beck, Rush, Shaw & Emery, 1979).*

The BDI is a 21-item self-report scale designed to measure intensity of depressive symptoms. It was first developed in 1961 by Beck, Ward, Mendelson, Mock and Erbaugh, then revised in 1979 by Beck, Rush, Shaw and Emery. This revised version was the instrument used in the current study. The BDI was chosen because of its wide acceptance within the field of psychological research, and based on the literature reviewed, it includes a group of the symptoms that I wished to explore as part of the current study.

The BDI has been used in more than 1500 published studies (Beck & Steer, 1984; Beck, Steer & Garbin, 1988) and remains one of the most commonly used psychometric measures for the measurement of depression. The original version was used as an interviewer assisted instrument. The 1978 revision altering it to a self-

administered tool. Internal consistency (Cronbach Alpha) is high, ranging from .82 to .94 for the standard form (Beck & Steer, 1984; Schaefer et al., 1985; Vrenberg, Krames & Flett, 1985). The majority of corrected item-total correlations are above .50 and all are significant beyond the .05 criterion (Beck & Steer, 1984). Concurrent validity with the Zung Self-rating Depression Scale and the Minnesota Multiphasic Personality Inventory depression scale ranges from .41 to .81 and .57 to .59, respectively (Gould, 1982; Meites, Lovallo & Pishkin, 1980; Schaefer et al, 1985). Similar findings have been reported (typically in the .60 to .70 range) when compared to the Hamilton Psychiatric Scale for depression and the SCL-90R depression factor (Steer & Beck, 1988).

The BDI has been used mainly in studies involving clinical based populations (such as Beck, 1963, 1967; Beck et al., 1990; Beck et al., 1961; Cochrane-Brink, Lofsky & Sadinofsky, 2000). Although many studies have been on clinical populations, the BDI has been used on non-clinical populations, for example Endler, Cox, Parker, and Bagby (1992) found the instrument to be a good measure of depression. Another study on college students by Bonner and Rich (1987) also used of this instrument on non-clinical populations.

The 21 items of the BDI measure pessimism, sense of failure, mood, self-dislike, self-accusation, dissatisfaction, suicidal wishes, feelings of guilt, crying, sense of punishment, irritability, social withdrawal, sleep disturbance, indecisiveness, ability to work, fatigue, distortion of body image, weight loss, somatic preoccupation, loss of appetite, and loss of libido. For each item (symptom) the participant is presented with a series of four statements of differing symptom intensity and is asked to indicate the statement that best describes his/her mood over the past week. For example in ranking his/her fatigue a participant would choose from the following: I don't get more tired

than usual; I get tired more easily than I used to; I get tired from almost anything; and I am too tired to do anything. The BDI takes five to ten minutes to complete (Beck & Steer, 1984; Kendall, Hollon, Beck, Hammen & Ingram, 1987; Steer & Beck, 1988).

All items receive a score from zero (least symptomatic) to three (most symptomatic). Scores are then summed to give a total score, with a maximum total score of 63. As a clinical tool, cut-offs vary slightly. Generally, there is agreement in the literature that scores below 10 are associated with normal functioning or minimal depression. Scores between 10 and 18 are associated with mild to moderate depression, and scores between 19 and 29 are classified as moderate depression. Severe depression is associated with scores above 30 (Beck et al., 1988; Kendall et al., 1987). For the purposes of the current study, the BDI total score was used as an indication of depression severity. The items of the BDI mainly relate to the cognitive and to a lesser extent the physical symptoms of depression. Therefore the positive well-being subscale of the Mental Health Inventory (MHI) and the Hopkins Symptom Checklist-21 (HSCL-21) were used to help 'capture' the somatic symptoms of depression by looking at the overall psychological well-being (both psychological well-being and psychological distress) of the individual.

*Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974).*

Beck (1963, 1967) first developed the BHS to explore the negative expectations of the future which form part of his triad-based theory of depression that posits that people with depression express negative expectations about the self, the future and the world. The Beck Hopelessness Scale was developed to measure the degree to which an individual's cognitive schemas are dominated by negative expectations about the future. It is this component of the triad that is theorised to link depression and suicidal behaviour (Beck 1963; 1967).

Beck et al. (1974) identified hopelessness as one of the core characteristics of depression, and hopelessness has implications in research on suicide. This study was the validation study for the Beck Hopelessness scale (BHS). The authors found the BHS to have a high degree of internal consistency and to show a relatively high correlation (.74) with other clinician ratings for hopelessness. The scale was also found to be sensitive to the change in depression of the patients over time. This scale has been used on many populations with studies reporting high internal consistency. For example, Beck et al. (1974) reported an alpha coefficient of .93 in a suicide attempters' sample, .86 in a general psychiatric sample, .83 for a forensic psychiatric sample and .63 in an undergraduate university sample.

In terms of the link to suicide, Cochrane-Brink et al. (2000) found that the BHS was a better predictor of suicide than the BDI or Beck Anxiety Inventory. Cochrane-Brink et al. pointed out that the BHS is a good predictor in the long term rather than the short term for suicide. Beck and Steer (1989) in a longitudinal study over ten years, found that scores above the cut-off of 9 were predictive of suicide (Beck & Steer, 1989). Bonner and Rich (1987) used the BHS to measure hopelessness amongst college students. These researchers found that the combined influence of depression, loneliness, few reasons for living, and negative life stress explained current suicide ideation the best. Wetzel (1976) found that hopelessness was more highly correlated with suicide intent than depression. Weishaar and Beck (1992) maintained that the majority of studies with clinical samples support the idea that there is a link between hopelessness, depression and suicidal behaviour. Given this hypothesised link, this scale was included due to recent concerns regarding suicidal behaviour within the sample population.

The BHS is a 20-item self-report questionnaire. Each item consists of a statement (e.g., My future seems dark to me) to which the participant responds True or False. The format of the questionnaire has nine items keyed false and eleven items keyed true. Participants are asked to respond to each item in terms of their attitude during the past week. Items are scored such that the higher scores are related to higher levels of hopelessness with scores ranging from 0 to 20. Scores above six are considered clinically indicative of mild hopelessness. Beck et al., (1974) through factor analysis, found that responses fall into three factors - affective, motivational and cognitive (Beck et al., 1974).

Depression and hopelessness are cited as predictors of suicidal ideation (Weishaar & Beck, 1992; Beck & Steer, 1989). In the current study the Beck Depression Inventory (BDI) and the Beck Hopelessness Scale (BHS) were used to ascertain the effect of mentoring on individual levels of depression and hopelessness.

*The Mental Health Inventory (MHI; Veit & Ware, 1983).*

The MHI was designed as a primary mental health measurement tool of psychological well-being and psychological distress. It has been found to be 'perfectly separable' into these two factors (Tanaka & Huba, 1984). The MHI contains 38 items, with equal numbers of positive and negative items. It is divided into subscales that can be scored and interpreted separately (McDowell & Newell, 1987). That is, the MHI provides two higher order factors on dimensions labelled by the authors as psychological well-being and psychological distress, as well as an overall mental health score. The Psychological Well-being subscale was used as a measure of well-being in the current study and has two factors labelled General Positive Affect and Emotional Ties. The Psychological Distress subscale consists of three factors labelled Anxiety, Depression and Loss of Behavioural/Emotional Control.

Weinstein, Berwick, Goldman, Murphy and Barsky (1989) found the MHI a useful tool for screening for depression and anxiety in primary care. However, as the intent of using this instrument in the current study was to examine psychological well-being only, the psychological well-being scale of the MHI was used. Scores for psychological well-being were calculated from this subscale of the MHI, which consists of 14 items. For each item, respondents are asked to indicate how they have felt about a particular aspect of their lives over the last month (e.g., During the past month, how much of the time were you a happy person?). Each statement is ranked on a seven point Likert-type scale where 1 = all of the time/always/extremely happy; and 7= none of the time/never/extremely unhappy. A maximum total score on the MHI positive well-being scale is 98. Positive well-being is indicated by a lower score. Veit and Ware (1983) reported internal consistency measures of 0.92 for psychological well-being, with a one-year stability coefficient of 0.63.

*Hopkins Symptom Checklist-21 (HSCL-21; Green, Walkey, McCormick, and Taylor, 1988).*

The original HSCL is a widely used measure of symptom distress. Derogatis, Lipman, Rickles, Uhlenhuth and Covi (1974) in their review of the development, history, evolution, rationale and validation of the HSCL, reported its reliability, validity and sensitivity to change have been well established. The HSCL has high test-retest reliability and inter-rater reliability (Derogatis et al., 1974) as well as internal consistency (Derogatis, 1977). Its construct validity has also been well established (Prusoff & Klerman, 1974).

The Hopkins Symptoms Checklist has been used in a number of studies. These include studies investigating psychological well-being. Jones and Kafetsios (2002) used the HSCL to assess the psychological well-being of adolescents (13-15 years) in

a war-affected society. In this study the Hopkins Symptoms Checklist showed good internal consistency and discriminant validity. Steketee and Doppelt (1986) examined the reliability and validity of the obsessive-compulsive scale as well as four additional subscales (identified in previous research) of the Hopkins Symptoms Checklist (HSCL). Steketee and Doppelt found that the HSCL detected change following treatment on the total score and on four of the five cluster scores. The obsessive-compulsive scale effectively discriminated obsessive-compulsive participants from other anxious-neurotic participants. Kubzansky, Berkamn, Glass, and Seeman (1998) used the HSCL in their investigation of the association of educational attainment with an array of risk factors for poor health among high-functioning older men and women.

Other studies have included the validity of this measure in other languages, for example Kleijn, Hovens, and Rodenburg (2001) examined the psychometric properties of the Arabic, Farsi, Serbo-Croatian, Russian, and English bilingual adaptations of the Harvard Trauma Questionnaire and HSCL-25. Results showed that the psychometric properties of both tests are adequate across these cultures and are, in general, applicable to measure symptoms of depression, anxiety, and posttraumatic stress disorder.

Some researchers use selected subscales from the full HSCL. For example Hudiberg, Brown, and Jones (1993) used the somatic complaint items on the Hopkins Symptoms Checklist. Shorter versions of the HSCL have also been found to have adequate statistical support in their use. For example Favaro, Rodella, Colombo, and Sanonastaso (1999) studied Nazi concentration camps survivors, and used the shorter version of the HSCL. Steel and Silove's (2000) chapter included a study on depression, anxiety, and PTSD, in asylum seekers in Australia. Measures included the HSCL-25, which assessed psychological well-being.

In 1988, Green et al. produced a short, less arduous, but acceptably reliable version of the HSCL with a replicable factor structure. The normative population was drawn from New Zealand and the United States. The outcome of this study was the 21 item version of the HSCL (HSCL-21), which was used in the current study. This 21 item HSCL, derived from the existing 58 item questionnaire, is considerably shorter and less arduous for participants yet still maintains excellent psychometric properties with consistently high reliabilities and good internal consistency (Green et al., 1988). The HSCL-21 also has a clear three-factor structure, which is shown by two quite distinct factor analytic methods. Green et al., found analysis of the 21 item HSCL revealed three replicable factor clusters each having seven items, corresponding to General Feelings of Distress (GFD), Somatic Distress (SD) and Performance Difficulty (PD) factors (Green et al.). General Feelings of Distress is loaded on the more emotional questions of the scale, Somatic Distress refers to bodily symptoms, and the Performance Difficulty factor includes anxiety symptoms related to performance.

A study in New Zealand that led to considering the HSCL-21 as a suitable instrument for this study was conducted by Deane, Scogstad, and Williams (1999) whose study population was male prisoners in New Zealand. These authors found acceptable validity and reliability of this measure for this population. Deane, Leathem, and Spicer (1992) found that the Cronbach alpha coefficients for the HSCL-21 scales were high, all above 0.80. Deane et al. supported the concurrent and construct validity of the measure, leading to its selection as an additional measure of well-being.

As with the original HSCL, respondents to the HSCL-21 are asked to respond to items in relation to how they have felt over the last month including the day the questionnaire was completed. Items such as “Difficulty in speaking when excited”, are

rated on a four point scale from 1 = Not at all to 4 = extremely, with higher scores indicating a higher distress level. The current study included the total distress score as well as the individual subscale scores, which produces a total maximum score of 84 and 28 for each of the three sub-scales.

*Intent to Quit (ITQ; O'Driscoll & Beehr, 1994).*

The current study included a three-question measure based on Meyer, Allen, and Smith's (1993) six-question measure, the 'Intent to quit the nursing profession' measure. The three item scale was developed by O'Driscoll and Beehr (1994) with one of the items reflecting the degree of intent to quit the job and the other two reflecting plans to seek alternative employment.

Other shortened measures for intent to quit have been used in other studies, such as Begley and Czajka (1993) who used a two-item intent to quit measure, which had a seven-point Likert scale with reliabilities of .79 and .76. The O'Driscoll and Beehr (1994) scale was chosen for the current study due to the unique situation of the Police in New Zealand, in that there is only one Police Organisation in New Zealand, therefore choosing to quit the organisation is equivalent to a choice to quit the profession. The longer version has extra questions relating to change of employment within the profession. Therefore the intent to quit questions included in the current study were: one question on general intent to quit; one question on intent to change profession; and a final question on the immediacy of intent to leave the profession. Each item was responded to on a 1 to 7 Likert-type scale, with higher scores indicating a higher intent to quit. For example item three is as follows: "How likely is it you will actually leave the Police within the next year?" answered from 1=very unlikely to 7=definitely.

Meyer et al. (1993) report coefficient alphas of 0.83 for both intent to quit the profession and intent to quit the organisation, two of the questions used in the current study. Within the current sample, internal consistency (Cronbach's alpha) for the three items ranged from 0.85 to 0.88 across the three time periods for the mentors, and 0.60 to 0.86 for protégé(e)s.

*Civilian Mississippi Trauma Scale (CMTS; Green, 1991).*

The CMTS has been used with a variety of populations including battered women (Kemp, Green, Hovanitz, & Rawlings, 1995), adolescents (Berton & Stabb, 1996), war veterans (Vreven, Gudanowski, King, & King, 1995), refugees (Marusic, Kozaric-Kovacic, Folnegovic-Smalc, & Ljubin (1995), traumatic event survivors (Koopman, Classen, & Spiegel, 1994), and the New Zealand Police (Stephens, 1996).

Kemp et al. (1995) utilised the civilian version of the Mississippi Scale for Posttraumatic Stress Disorder (PTSD) in their study of battered women and non-battered but verbally abused women. Their findings were consistent with other studies, confirming the utility of this measure for PTSD symptoms. Berton and Stabb (1996) also found the CMTS useful when they investigated variables associated with the incidence of symptomatology characteristic of PTSD in adolescents in a major metropolitan area. Vreven et al. (1995) examined the reliability and validity of the civilian version of the Mississippi Scale for Combat-Related PTSD (MSCRP) using data from 668 civilians. They reported acceptable reliability coefficients although lower than those reported for the military version. The mean inter-item correlation was .39 and coefficient alpha was .86.

Marusic et al. (1995) used two scales to assess the prevalence of PTSD in a sample of refugees and displaced persons (aged 18 years to over 50 years) living in two refugee camps in Zagreb, Croatia. The standard Mississippi questionnaire for

civilian PTSD was used to assess PTSD symptomatology, as well as the PTSD interview developed by Watson, Juba, Manifold & Kucala (1991). The prevalence rate for PTSD was 38.4% according to the Mississippi scale and 37.0% according to Watson's scale. Both tests demonstrated good psychometric characteristics in the refugee population from Bosnia, Herzegovina, and Croatia.

Koopman et al. (1994) examined factors predicting the development of posttraumatic stress symptoms among 154 adults after a traumatic event (a fire). The civilian version of the Mississippi Scale for Combat-Related Posttraumatic Stress Disorder was used. Dissociative and loss of personal autonomy symptoms experienced in the fire's immediate aftermath, as well as stressful life experiences occurring later, significantly predicted posttraumatic stress symptoms.

A review of twelve representative psychometric PTSD measures by Watson (1990) concluded that the Mississippi Scale for PTSD is one of three measures that have good validity, with the remaining two being structured interviews.

Stephens (1996) used the Civilian version of the Mississippi Scale for Combat-related PTSD in her study of New Zealand Police. Stephens noted that while one of the most reliable and valid of all the instruments in making the classification of PTSD by survey is the Mississippi Scale for Combat-related PTSD (McFall, Smith, Roszell, Tarver & Malas, 1990; Kulka et al., 1991; Kulka & Schlenger, 1993), her findings supported Vreven et al. (1995), who reported good reliability and validity of the civilian version for use on non-combat personnel. Stephens' coefficient alpha was .90 and she attributed this to Vreven et al. (1995) who found that the lowest measurement of error was at the high end. In Stephens' study her participants' mean scores were higher than those obtained by Vreven et al.

The CMTS was listed by Miller (1996) amongst some of the more prominent scales used in the development, standardisation, and evaluation of life stress. This reflected one of the types of distress that was to be measured in the current study.

PTSD is characterised by the onset of affective, autonomic and cognitive symptoms following a psychologically traumatic event that in general is considered outside the range of usual human experience (American Psychiatric Association, 1994). Although the Mississippi scale for combat-related PTSD (M-PTSD; Keane, Caddell, & Taylor, 1986) had strong evidence for reliability and validity and would have been the considered choice for the current study, Stephens (1996) found poor response rates to this scale and used the civilian scale instead with better results (reliability coefficient alpha .90). The civilian scale also contains items referring to depression, suicidal ideation and guilt, which fits in well with the current study.

The CMTS is a 39-item self-report questionnaire. Each item presents the respondent with a statement, for example, "In the past I had more close friends than I have now", to which the participant responds on a five point Likert-like scale from 1 = Not at all true /very unlikely/never/never true/ to 5 = Extremely true/extremely likely/very frequently/very frequently true.

The format of the questionnaire has nine reverse scored items and 30 items scored as marked on the scale. Participants are asked to respond to each item in terms of their attitude during the past month. Items are scored such that the higher scores are related to higher levels of trauma symptoms with scores ranging from 39 to 195.

Acceptable reliability coefficients (coefficient alpha .86) were reported in a recent study of psychometric properties of the scale (Vreven, et al., 1995). Considering these factors, the CMTS has adequate reliability and validity for distinguishing between groups, although not for assigning individuals to categories.

### *Mentor Relationship Questionnaire (see Appendices B and C)*

The second questionnaire distributed to participants in groups 1 and 3 (the two experimental groups) at time 3 (the end of the six-month mentor period) is attached as Appendices B and C. Participants were asked to answer open-ended questions about the mentor-protégé(e) relationship, and the wording invited answers that were less structured than the Combined Measures Questionnaire. There were two versions of the questionnaire distributed, one prepared for protégé(e)s (see Appendix B) and the other for mentors (see Appendix C). The protégé(e)s' questionnaire had 11 questions and the mentors' questionnaire had one extra question which asked: "Were there other roles you fulfilled?".

The first question was "What is your evaluation of the mentoring relationship?". The rest of the questions concerned the relationship and some of the possible benefits a mentor relationship might provide, such as "Did you expand your own and your protégé(e)s understanding of the workings of the organisation?" for the mentors, and "Did your mentor expand your understanding of the workings of the organisation?" for the protégé(e)s. The areas covered in this questionnaire were: evaluation of the mentoring relationship, frequency of meeting, commitment to the relationship, encouraging two-way communication, clarifying organisational culture, feedback, information on career opportunities, information sources, understanding of the organization, confidence as a result of the relationship and insight into problem solving, and for the mentor – other roles fulfilled (in the context of the relationship).

### *Procedure*

#### *Selection of Protégé(e)s*

180 Protégé(e)s volunteered from a current training cohort of Auckland-based sworn<sup>15</sup> Probationary Constables. All Probationary Constables who came to Auckland during the 12 month period approved by the police for the current study (February 1998 to February 1999) were offered the opportunity to have a mentor and to take part in this study. This included all Probationary Constables who had undergone their initial six months' training, and who were then required to undergo further training and pass IST units<sup>16</sup> before they were given their permanent appointment as a Constable.

If the Probationary Constables chose to take part in the mentor programme they were asked whether they wished to participate in the study. If they chose not to take part in the study they were assigned a mentor. The offer to participate in the study consisted of a 15 minute presentation on the Probationary Constables' first day in Auckland, during which the project was explained, and information sheets and consent forms were distributed (Appendices E & F). As part of this explanation the Probationary Constables were informed that if they participated in the study and were not initially assigned a mentor in line with the study they would be assigned a mentor at the end of the experimental period. Of 320 potential protégé(e)s, 200 agreed to have a mentor and of these 200, a total of 180 Probationary Constables (65% of

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<sup>15</sup> Sworn - having taken an oath and therefore have the power to execute the law as a Constable

<sup>16</sup> IST units - set modules of information which provide supplemental in-service training

potential candidates and 90% of those wanting mentors), agreed to participate in the current study. In accordance with Solomon Four Group design protégé(e)s who agreed to take part in the study were randomly assigned into four groups (as outlined in Table 3, p. 91).

### *Selection of Mentors*

Mentors were volunteers who responded to an advertisement for mentor training in the Region One's fortnightly newsletter and attended the mentor training day. The Region One newsletter has a readership of around 1200 people. Of these approximately 800 were eligible for the study. Seventy-five individuals responded to the advertisement and 74 (8% of the total population of 800 but 99% of those recently trained) agreed to participate in the study. The offer was presented at the mentor training day, when mentors were also provided with an information sheet and consent form (see Appendices G & H). Those who chose to participate in the study were assigned protégé(e)s who wished to participate in the current study; those who chose not to participate in the study were assigned protégé(e)s who did not wish to participate in the study.

### *Training of mentors.*

Mentoring is recognised as a tool for socialising new members and keeping plateaued managers involved (Kram, 1985, 1986). The package delivered to the mentors was designed to focus the mentor on a psychosocial support mentorship and to encourage the mentors to take a joint discovery focus toward problem-solving (Sears et al., 2000). The training consisted of a one-day training package written by the researcher and presented by the researcher with the aid of a trainer. The package included a booklet and handouts that are attached as Appendices I and J. The training

package drew on many authors and styles to try to give a comprehensive day's training which would adequately prepare the mentor for their experience. Feedback was invited at the end of the training day and also at the six-month period (see Appendices K & L) on whether this package was adequate preparation for the experience.

### *Phases of the study*

The current study was broken into five phases after the initial approval was received from Police National Headquarters and from the Ethics Committee of Massey University (Approval number HEC97/155).

#### *Phase I.*

The first phase consisted of approaching District Commanders from within Region One to seek their approval to conduct the research within their district. Once this additional approval was obtained, approval to distribute questionnaires to staff within each district was also obtained.

#### *Phase II.*

Phase two involved mailing a covering letter and participant information sheet to all Probationary Constables posted to Auckland while they were still at the Police College.

#### *Phase III.*

Phase three related to A Priori power calculations to estimate sample size needed for sufficient statistical power in the current study.

Statistical power is important as it represents the probability of detecting an effect. Therefore as power increases the likelihood of obtaining a result increases. If statistical power is low, it increases the risk of type 2 errors and interpretation of results is therefore a problem. If there is not enough statistical power this may lead to

the conclusion there is no effect whereas it is also likely the investigation was not sensitive enough to detect a change if there was one present (Cohen, 1988).

An experimental design's sensitivity can be calculated by using statistical power analysis. There are four components to this calculation. The variables involved in this calculation are: alpha level, population effect size, statistical power and sample size (Rossi, 1990; Myers & Well, 2003). The 4 variables are interlinked and can therefore be calculated as a function of each other. Cohen (1988) has suggested conventional levels that can be used to represent 'small' (.1), medium' (.25) and 'large' (.4) effects in social science research. Although these effect sizes are approximations, they have some support in subsequent reviews of the literature (Rossi, 1990).

Studies on mentoring, psychological well-being, and the police are limited. Social science research and literature including power analyses are even more limited with the main findings in review articles (e.g., Clark-Carter, 1997; Fern and Monroe, 1996; Gillett, 1994; Rossi, 1990; Sedmeiler and Gigerenzer, 1989). As there is a dearth of experimental research in the social sciences including power analysis A Priori Power analyses were calculated on expected mean differences and effect sizes, based on the available literature. The effect size estimate was based on a predicted difference of means (Cohen, 1988; Glass & Hakstian, 1969; Hedges & Olkin, 1985).

#### *A Priori Power Analysis.*

For the purposes of the current study statistical power was calculated based on projected effect size (Cohen, 1988), using Cohen's power tables and effect size conventions, together with GPower a computer programme designed to calculate statistical power (Buchner, Erdfelder, & Faul, 1997). Approximate statistical power calculations for the 3 effect sizes were completed with alpha set to .1 and .5. Table 2

shows the predicted sample size needed. The power was set at .8 (Cohen, 1988), which is the recommended level for confidence in statistical analyses.

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).*

Effect size ( based on Cohen)	Predicted sample size needed		
	Small (.01)	medium (.25)	large (.4)
<b>Multiple group comparisons</b>			
<b>Alpha levels for four groups</b>			
.1	1552	256	104
.5	1096	180	76
<b>Alpha levels for two groups</b>			
.1	1172	192	78
.5	788	128	52

As I expected a large effect and used an alpha set at .5, this indicated that further calculations were needed. Power analyses using GPower (Buchner, Erdfelder, & Faul, 1997) were carried out and for a minimum .8 power value (Cohen, 1988) and based on these calculations the sample size for post hoc analyses of the various measures used in the current study ranged from 11 to 18. The sample size was therefore estimated at 20 per group. Based on a 25% attrition rate (Dillman, 1978; Flick, 1988) the target number for recruitment to the project was 25 per group (100 proteges and 50 mentors). This was verified by calculation using difference of means calculations as outlined by Glass & Hakstein (1969). In the current study, it was

accepted that if there were small effects, the probability of finding these effects was low, due to the projected maximum available sample size was 250, and the expected sample size of 120 for protégé(e)s and 60 for mentors. Moderate to large effects were of specific interest in the current study, as small effects would not be clinically significant.

#### *Phase IV.*

Phase four was the invitation for participants to become part of a mentor relationship. For protégé(e)s phase four occurred in Auckland on induction day, which is the first day of duty for all Probationary Constables, and for the mentors, phase four occurred during the mentor training day. Probationary Constables were given a brief presentation about the study (10-15 minutes) and asked whether they wished to participate in the study. Participants were told that their responses were confidential and that anonymity was to be maintained by assigning numbers to participants, and no identification was placed on questionnaires. Participants were also informed that they could skip or omit any question, they could withdraw from the study at any time, and that although the overall results of the study would be made available to any interested participants when the study was completed, individual results would not be provided. Throughout the study, anonymity was maintained by assignment of numbers to participants. The maintenance of anonymity did not allow for disclosure of those participants who, according to their scores on the measures were distressed, and were likely to be experiencing severe depression, increased hopelessness, suicide risk, or PTSD. Therefore access to resources was provided to all participants of the study, in the letter of introduction and the presentation inviting participation. These identified

support networks available to the participants, including the Police Welfare Officers, this researcher or their supervisor, and also how to access private therapists.

### *Phase V.*

Phase five consisted of participation in the study. Those Probationary Constables who volunteered to be protégé(e)s were randomly assigned into four groups in accordance with a Solomon Four Group design. The Combined Measures Questionnaire which included assessments of depression (BDI), hopelessness (BHS), intent to quit (ITQ), positive (psychological) wellbeing (MHI), psychological distress (HSCL) and Post Traumatic Stress Disorder (CMTS), was distributed, in accordance with the Solomon Four Group design, to those in group one (experimental group) and group two (control group 1). Mentors were also assessed within the scope of the Solomon Four Group design (see Table 3, p.91), however, due to lack of numbers in the control groups these data were of limited use for inter-group comparisons.

Officers (protégé(e)s or mentors) allocated to experimental group 1 and control group 1 completed the Combined Measures Questionnaire and the Demographic Questionnaire (see Appendices A & D respectively) at this time (pre-test). Within the next week those protégé(e)s in experimental group 1 and control group 2 (experimental group 2) were allocated mentors. This was achieved by random allocation. The mentor and protégé(e) were informed by letter of their respective mentor/protégé(e) and given contact details. The mentor relationship was agreed to for a period of six months and a contract was drawn up between the protégé(e) and mentor (see Appendix M).

At the end of the mentoring period (at six months – time 3) a reassessment occurred for all groups. Although offers of a mentor were made to those in control

groups 2 and 4 at this time, no Probationary Constables accepted this offer. There was also a follow-up post-test of all participants at 12 months from the original date of mentor allocation.

The Combined Measures Questionnaire distributed at various times during the current study was given to the participants in the same format each time. The summary of distribution can be seen in Table 4 (p. 94). Instructions were given that the demographic information need only be completed at one time unless some of the information had changed in the interim. The data were then collated at the four time intervals. The Mentor Relationship Questionnaire (see Appendices B and C) was distributed at six months (time 3) to groups 1 and 3 to gather information not tapped by the Combined Measures Questionnaire.

Once all data were collected, all assessments were scored according to standardised procedures. All data were then entered into an SPSS 11.0 (Norusis, 2002) file for analysis.

### *Design*

Consent forms were sent out with each mail-out during the twelve month project (see Appendices F and H). Support for both mentors and protégé(e)s was given throughout the study in the form of availability of the researcher, their supervisor, and also staff welfare officers. Mentors were further supported with a monthly newsletter, a contact list of other mentors was provided, and bimonthly meetings for networking and sharing of experiences were co-ordinated and facilitated by the researcher.

Of the 74 mentors who volunteered to take part in the study six mentors could not carry out the mentor process for various reasons (e.g., parental leave), however these mentors chose to provide control information by being assigned to group 2

(*control group 1*) and group 4 (*control group 3*). The rest of the mentors were assigned to protégé(e)s and therefore were assigned to either experimental group 1 or control group 2 (*experimental group 2*). Descriptive (demographic) characteristics of protégé(e)s and mentors in each of the four groups is presented in Table 1 (p. 67). Group 1 is the first experimental group, group 2 is the corresponding control group, group 3 is the second control group, which also acted as a second experimental group, and group 4 is the corresponding control for group 3. The original composition of the groups was 38 mentors in group 1, two mentors in group 2, 30 mentors in group 3 and four mentors in group 4. The original composition of protégé(e)s was 45 in each group.

The Combined Measures Questionnaire, and the Demographic Questionnaire (see Appendices A and D) were distributed in accordance with the Solomon Four Group design (see Table 5, p. 95). To encourage return of questionnaires prepaid addressed envelopes were provided in each mailout, and after each distribution reminder notices were sent out twice and one phone call to all participants was made.

#### *The Solomon Four Group Design*

The Solomon Four Group design is a true experimental design that allows for control of both internal and external sources of error or ambiguity (Braver & Braver, 1988; Solomon, 1949). The design as it relates to the current study is depicted in Table 3 (p. 91).

As can be seen in Table 3, the Solomon Four Group design involves both a pre-test, post-test design (i.e., experimental versus control group 1); and a post-test only design (i.e., control group 2 vs. control group 3). The effect of this is that there

are two experimental groups with the second experimental group also acting as a control to the first experimental group - effectively giving three control groups.

Table 3

*Solomon Four Group Design*

	Time		
	1	2	3
	Pre-test	Experiment Takes Place	Post-test
Experimental group 1	Assess	Mentoring and Assess	Assess
Control group 1	Assess		Assess
Control group 2		Mentoring and Assess	Assess
Control group 3			Assess

The major advantage of the Solomon Four Group design is that it can be used to indicate to the researcher whether changes in the dependent variable are due to an interaction between the pre-test and the treatment (Solomon, 1949). In the current study, the goal is to assess the effect on Police Officers' functioning (the dependent variable) after receiving mentoring (the independent variable). During the pre-test, the groups were asked questions regarding their functioning. The experimental treatment involved mentoring with a trained mentor. If experimental group 1 scores are lower on functioning than control group 1, it may be due to the independent variable.

Alternatively it could be that filling out a pre-test questionnaire has sensitised participants to their own level of functioning. That is, the participants in experimental group 1 may be alerted to the issues of functioning of interest to the study and they

may, as a result, react more strongly to the experimental assessment than they would have without such pre-testing. If this is true, then control group 2 (experimental group 2) should show less change than experimental group 1. If the independent variable has an effect separate from its interaction with the pre-test, then control group 2 (experimental group 2) should show more change than control group 1. If control group 1 and control group 2 (experimental group 2) show no change but experimental group 1 does show a change, then change is produced only by the interaction of pre-testing and treatment.

In addition to allowing this teasing out of treatment and pre-test effects, the Solomon Four Group design allows assessment of maturation and history effects by comparing the post-test scores of control group 3 with the pre-test scores of experimental group 1 and control group 1.

As noted, the Solomon Four Group design is acknowledged as having an advantage over other test designs in that it enables the assessment of pre-test sensitisation, thus adding a higher degree of external validity to the design (Braver & Braver, 1988). Experimentally, this design has relevance as it allows “the researcher to control the main effects of testing, the interaction of testing with the experimental stimulus and the eight sources that influence internal validity” (Meadow, 1988, p 368). Therefore, results are more likely to indicate accurately the relationship between experimental stimuli and changes indicated through data manipulation and analysis. Below, the computations which underlie the Solomon Four Group design are described in more detail.

### *Computations.*

Having justified the selection of a Solomon Four Group design, a brief examination of the underlying computations was warranted. This examination is based upon that presented in Solomon's original presentation of the design (Solomon 1949, p. 147).

As can be seen in Table 4 (p. 94), all groups are exposed to the event (Ev - beginning as a Probationary Constable to Region one), therefore the following statements can be made:

- (1)  $d_4 = f(E1)$  = change in group C3 is a function of the outside uncontrolled event, Ev;
- (2)  $d_3 = f(Ev+T1)$  = change in group C2/E2 is a function of mentoring and the event, Ev;
- (3)  $d_2 = f(E1+P1)$  = change for group C1 is a function of the pre-test and the event, Ev;
- (4)  $d_1 = f(E1+P1+T1+I)$  = change for group E1 is due to the summation of the pre-test, the event (Ev), the mentoring process, and the interaction between pre-test and the succeeding events in time.

A more detailed description of statistical analysis of Solomon Four Group is outlined in Braver and Braver (1988), (see Table 4).

Table 4

*Numerical values needed for the analysis of interaction effect in a four-group design.*

	pre-test	pre-test mean	mentor	event (Ev)	post-test	post-test mean	change in means	interaction
E1	Yes	$a_1 \pm \sigma_{ma1}$	Yes	Yes	Yes	$b_1 \pm \sigma_{mb2}$	$d_1 = b_1 - a_1$	$d_1 - (d_2 + d_3 - d_4)$
C1	Yes	$a_2 \pm \sigma_{ma2}$	No	Yes	Yes	$b_2 \pm \sigma_{mb2}$	$d_2 = b_2 - a_2$	
C2	No	$i = a_1 + a_2 / 2$	Yes	Yes	Yes	$b_3 \pm \sigma_{mb3}$	$d_3 = b_3 - a_3$	
C3	No	$i = a_1 + a_2 / 2$	No	Yes	Yes	$b_4 \pm \sigma_{mb4}$	$d_4 = b_4 - a_4$	

Note: - a, b, d = means;  $\sigma$  = standard deviation; i = interaction; E1 = Experimental group 1; C1 = Control group I; C2 = Control group 2 (Experimental group II); C3 = Control group 3.

Tabulated in Table 5 is the distribution of the Combined Measures Questionnaire, the Demographic Questionnaire and the Mentor Relationship Questionnaire, in accordance with the Solomon Four Group Design (at times as indicated).

Table 5

*Questionnaire distribution and timings.*

	Pre-test (1)	Training (2)	6 month post-test (3)	12 month follow-up (4)
<b><u>1. Experimental Group 1</u></b>				
Combined Measures Questionnaire	MP	MP	MP	MP
Demographic Questionnaire	MP	MP	MP	MP
Mentor Relationship Questionnaire			MP	
<b><u>2. Control Group 1</u></b>				
Combined Measures Questionnaire	MP		MP	MP
Demographic Questionnaire	MP		MP	MP
<b><u>3. Control Group 2 (Experimental Group 2)</u></b>				
Combined Measures Questionnaire		MP	MP	MP
Demographic Questionnaire		MP	MP	MP
Mentor Relationship Questionnaire			MP	
<b><u>4. Control Group 3</u></b>				
Combined Measures Questionnaire			MP	MP
Demographic Questionnaire			MP	MP

Note: M = Mentors (Field Support Officers)

P = Protégé(e)s (Probationary Constables)

Blank cells = No assessment at that time

## CHAPTER 4

### Results

#### *Analyses*

The statistical package SPSS/PC version 11.0 was used to evaluate the data and relationships among the variables (Norusis, 2002). Analysis was undertaken in line with the six sections described below. An alpha level of .05 was used.

The results section begins with a review of the quantitative data from the Combined Measures Questionnaire, followed by an examination of data associated with the Mentor Relationship Questionnaire. The results of this study are presented in six sections.

Section one: mean performances of mentors and protégé(e)s across the various measures.

Section two: the scale characteristics in the form of Cronbach alphas.

Section three: the level of equivalence of the control and experimental groups on pre-test data, and across the four groups.

Section four: the within and between group comparisons.

Section five: the results of a priori and post hoc statistical power analyses.

Section six: the results of the Mentor Relationship Questionnaire.

#### *Section One: Overall performances of mentors and protégé(e)s*

Descriptive statistics were generated for each of the following scales/subscales at pre and post-test for protégé(e)s and mentors: Beck Depression Inventory (BDI), Civilian Mississippi Trauma Scale (CMTS), Beck Hopelessness Scale (BHS), Hopkins Symptom Checklist (HSCL), Intent to quit (ITQ), and the Mental Health Inventory (MHI). The HSCL total score was divided into three psychological distress

factors: General Feelings of Distress (GFD), Somatic Distress (SD) and Performance Difficulty (PD) (Green et al., 1988). The means and standard deviations of each of these measures are presented in Table 6 (p. 94) for mentors and Table 8 (p. 96) for protégé(e)s.

Table 6

*Means and Standard Deviations by group for the Mentors at the specified times during the study.*

Measure →	BDI	CMTS	BHS	HSCL – GFD	HSCL-PD	HSCL-SD	HSCL-TOT	ITQ	MHI
Group ↓									
<b>Time 1</b>									
1 (n=37)	2.73 (2.92)	71.78 (12.5)	3.14 (2.51)	10.51 (3.71)	11.89 (2.47)	9.86 (1.57)	32.27 (5.60)	5.72 (2.41)	35.43 (10.72)
2 (n=2)	6.5 (2.12)	82 (5.66)	3.00 (4.24)	17.00 (7.07)	13.00 (2.83)	11.00 (4.24)	41.00 (.00)	12.50 (10.60)	43.00 (18.38)
<b>Time 2</b>									
1 (n=17)	2.35 (3.10)	74.53 (14.64)	4.48 (4.06)	9.18 (2.30)	10.53 (2.90)	9.53 (2.26)	29.24 (6.17)	5.06 (2.84)	41.53 (7.71)
3 (n=12)	4.83 (5.73)	76.50 (18.14)	2.92 (3.60)	11.17 (2.82)	26.58 (10.40)	10.25 (2.90)	32.00 (7.19)	6.00 (2.95)	48.41 (12.06)
<b>Time 3</b>									
1 (n=16)	5.81 (3.15)	74.81 (9.25)	2.13 (2.06)	10.13 (2.92)	11.93 (3.32)	9.81 (1.56)	31.88 (5.42)	7.19 (3.31)	46.56 (8.59)
2 (n=1)	8.00	86.00	6.00	22.00	11.00	8.00	41.00	5.00	64.00
3 (n=9)	3.11 (4.20)	70.00 (15.16)	4.22 (5.02)	9.22 (4.18)	11.56 (2.40)	9.33 (1.66)	30.11 (7.08)	9.78 (4.55)	48.78 (13.74)
4 (n=2)	7.00 (.00)	85.00 (2.83)	3.00 (1.41)	12.00 (2.83)	23.50 (20.51)	11.00 (4.24)	18.50 (12.02)	10.50 (4.95)	48.50 (12.02)
<b>Time 4</b>									
1 (n=5)	2.6 (8.94)	108.40 (2.51)	3.6 (5.81)	11.00 (2.24)	9.00 (.71)	10.80 (.45)	30.60 (2.07)	5.40 (1.34)	35.20 (2.68)
3 (n=2)	1.00 (1.41)	110.00 (4.24)	14.00 (1.41)	11.00 (2.83)	10.50 (.71)	11.50 (2.12)	33.00 (4.24)	11.50 (2.12)	37.50 (6.36)
4 (n=2)	1.50 (.72)	106.50 (.71)	16.00 (.00)	14.00 (1.41)	6.50 (3.54)	12.00 (1.41)	25.00 (14.14)	7.00 (4.24)	40.50 (3.54)

*Note.* For time 4, group 2 is omitted as none of the participants from this group completed the post-test.

The attrition was variable for the groups (see Table 6, p.98). For a clearer interpretation of this, attrition rate has been summarised in Table 7. As can be seen in Table 7, group 1 originally had 38 participants; one dropped out at time 1, 20 dropped out by time 2, one more at time 3 and all other participants by time 4. Of the 38 original participants in this group approximately 64% had dropped out at the end of the experimental (mentor) period. Group 2 had two participants; none dropped out by time 2, one failed to return the questionnaire at time 3 and two returned the final questionnaire (time 4). Of the two original participants in this group, one had dropped out at the end of the experimental period. Group 3 had 30 participants; 18 had dropped out by time 2, a further three at time 3 and a further seven at time 4. Of the 30 original participants in this group approximately 70% had dropped out at the end of the experimental period.

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.*

Time →	1	2	3	4
Group ↓				
1 (n=38)	3 [1]	45 [21]	64 [24]	100 [38]
2 (n=2)	0 [1]		50 [1]	0 [0]
3 (n=30)		60 [18]	70 [21]	93 [28]
4 (n=4)			50 [2]	50 [2]

Note: zeros indicate that there were participants in that group at that time and none had left the study.

Table 8

*Means and Standard Deviations for the Protégé(e)s at the specified times during the study.*

Measure → Group↓	BDI	CMTS	BHS	HSCL – GFD	HSCL-PD	HSCL-SD	HSCL-TOT	ITQ	MHI
<b>Time 1</b>									
1(n=24)	2.67 (4.10)	69.95 (11.78)	2.25 (1.89)	10.5 (3.16)	12.08 (3.81)	8.21 (1.38)	30.79 (6.76)	4.29 (1.71)	35.63 (13.20)
2 (n=38)	2.18 (3.00)	65.76 (11.30)	2.05 (1.83)	10.08 (3.55)	11.16 (3.27)	8.79 (1.53)	30.03 (6.85)	4.32 (2.07)	29.34 (10.24)
<b>Time 2</b>									
1 (n=17)	2.00 (3.32)	70.65 (12.26)	2.24 (1.44)	10.71 (4.19)	12.24 (4.32)	8.47 (1.46)	31.41 (7.47)	3.88 (1.54)	41.52 (12.04)
3 (n=13)	2.54 (3.99)	68.50 (14.27)	1.58 (.79)	10.38 (2.22)	16.92 (9.49)	8.77 (1.87)	28.61 (5.27)	5.38 (4.01)	43.23 (10.75)
<b>Time 3</b>									
1 (n=11)	2.18 (2.60)	71.00 (13.47)	1.73 (1.79)	9.91 (4.37)	10.73 (2.83)	8.55 (1.57)	29.18 (6.29)	4.45 (1.57)	42.55 (9.07)
2 (n=15)	3.73 (4.23)	67.20 (11.68)	2.53 (2.70)	10.47 (4.47)	10.80 (4.00)	8.73 (1.87)	30.00 (8.34)	4.80 (2.86)	42.33 (15.43)
3 (n=8)	3.13 (2.90)	68.88 (13.20)	2.63 (2.39)	9.50 (2.73)	10.75 (2.71)	8.50 (1.41)	28.75 (5.90)	5.50 (4.41)	44.63 (11.67)
4 (n=15)	2.80 (2.46)	70.00 (9.31)	2.53 (2.03)	8.87 (2.13)	11.87 (3.54)	8.67 (1.76)	29.40 (5.82)	7.53 (4.84)	45.00 (11.72)
<b>Time 4</b>									
1 (n=4)	1.00 (1.41)	110.00 (12.19)	11.25 (7.04)	9.00 (2.16)	9.25 (1.71)	9.50 (1.29)	27.75 (3.69)	4.00 (1.41)	38.25 (6.02)
2 (n=3)	2.00 (1.73)	111.33 (3.21)	6.00 (8.66)	10.67 (2.31)	8.33 (.58)	9.67 (2.31)	28.67 (4.93)	5.00 (1.73)	33.67 (.58)
4 (n=3)	1.33 (1.15)	114.67 (5.86)	nil	10.33 (2.52)	9.33 (1.53)	10.67 (2.52)	30.33 (6.51)	6.00 (2.65)	37.33 (9.61)

*Note.* For time 4, group 3 was omitted as none of the participants in this group completed the post-test.

As can be seen in Table 8 (p. 100) attrition was variable for the protégé(e) groups as well. A summary of these rates can be seen in Table 9. Originally group 1 had 45 participants, 21 did not fill in the initial forms, a further seven did not fill out the forms at time 2, six more did not fill out the questionnaire at time 3 and seven more at time 4. Of the 45 original participants in this group approximately 75% did not complete the questionnaire at the end of the mentored period. Group 2 had 45 participants; seven dropped out at time 1, and a further 23 dropped out at time 3. Approximately 66% of group 2 participants had dropped out at the end of the mentored period. Group 3 had 45 participants; 32 dropped out by time 2, a further five at time 3 and the other eight by time 4. Of the 45 original participants in this group approximately 82% had dropped out at the end of the mentored period.

Table 9

*Summary of total attrition rates - percentage [and number] for protégé(e)s by group and time, where n is the original number of participants allocated to that group.*

Time →	1	2	3	4
Group ↓				
1 (n=45)	47 [21]	62 [28]	75 [34]	91 [41]
2 (n=45)	16 [7]		66 [30]	93 [42]
3 (n=45)		71 [32]	82 [37]	100 [45]
4 (n=45)			66 [30]	93 [42]

Tables 10-15 list the means and standard deviations for the sample as a whole. Table 10 shows the whole sample and Tables 11-15 are the whole sample by demographic sub groups. There was no significant variance in the groups when considering the sample as a whole.

Table 10

*Means and Standard Deviations for total sample at times 1-4.*

Measure →	BDI	CMTS	BHS	HSCL – GFD	HSCL-PD	HSCL-SD	HSCL-TOT	ITQ	MHI
Group ↓									
<b>Time 1</b>									
(n=101)	2.58 (3.27)	69.29 (12.11)	2.51 (2.18)	10.48 (3.65)	11.68 (3.12)	9.09 (1.70)	31.25 (6.49)	4.99 (2.66)	33.34 (11.59)
<b>Time 2</b>									
(n=84)	2.56 (3.62)	70.76 (13.34)	2.98 (2.88)	10.18 (3.13)	14.10 (8.09)	9.05 (2.04)	29.88 (6.22)	4.73 (2.65)	41.52 (10.39)
<b>Time 3</b>									
(n=77)	3.77 (3.45)	71.08 (11.71)	2.60 (2.68)	9.95 (3.71)	11.65 (4.40)	9.01 (1.76)	29.88 (6.82)	6.58 (3.99)	45.19 (11.76)
<b>Time 4</b>									
(n=19)	1.68 (1.25)	110.16 (6.18)	8.81 (7.20)	10.74 (2.38)	8.89 (1.63)	10.53 (1.65)	29.32 (5.25)	5.95 (2.78)	36.74 (5.03)

Table 11

*Means and Standard Deviations for total sample, demographic gender, at times 1-4.*

Measure →	BDI	CMTS	HSCL-TOT	HSCL-PD	HSCL – GFD	HSCL-SD	ITQ	MHI	BHS
Group ↓									
<b>Time 1</b>									
Male (n=76)	2.29 (3.25)	68.37 (11.94)	30.74 (6.57)	11.50 (3.19)	10.22 (3.80)	9.01 (1.79)	4.63 (1.97)	33.54 (12.42)	2.49 (2.18)
Female (n=24)	3.62 (3.23)	72.71 (12.32)	33.13 (5.98)	12.33 (2.93)	11.42 (3.02)	9.38 (1.41)	6.21 (4.00)	33.21 (8.65)	2.71 (2.20)
<b>Time 2</b>									
Male (n=60)	2.62 (3.77)	70.65 (13.71)	29.63 (6.60)	13.88 (8.71)	10.08 (3.43)	9.07 (2.05)	4.98 (3.01)	42.65 (10.92)	3.07 (2.83)
Female (n=24)	2.42 (3.30)	71.04 (12.62)	30.50 (5.26)	14.63 (6.42)	10.42 (2.23)	9.00 (2.06)	4.08 (1.21)	38.71 (8.45)	2.74 (3.06)
<b>Time 3</b>									
Male (n=56)	3.80 (3.29)	71.95 (9.74)	30.27 (6.07)	11.36 (3.05)	9.80 (3.78)	9.11 (1.80)	7.00 (4.10)	45.71 (11.97)	2.57 (2.91)
Female (n=21)	3.67 (3.94)	68.76 (15.88)	28.86 (8.60)	12.43 (6.87)	10.33 (3.55)	8.76 (1.67)	5.48 (3.53)	43.81 (11.36)	2.67 (2.01)
<b>Time 4</b>									
Male (n=14)	2.14 (1.10)	110.14 (3.92)	31.43 (3.35)	9.21 (.98)	11.21 (1.93)	11.07 (1.33)	6.86 (2.69)	35.93 (4.67)	5.91 (6.85)
Female (n=5)	.40 (.55)	110.20 (11.03)	23.40 (5.32)	8.00 (2.74)	9.40 (3.21)	9.00 (1.58)	3.40 (.55)	39.00 (5.87)	15.20 (1.64)

Table 12

*Means and Standard Deviations for total sample, demographic ethnicity, at times 1-4.*

Measure → Group ↓	BDI	CMTS	HSCL-TOT	HSCL-PD	HSCL – GFD	HSCL-SD	ITQ	MHI	BHS
Time 1									
Maori (n=11)	5.09 (3.65)	77.18 (12.01)	34.36 (6.12)	12.73 (2.65)	12.73 (4.25)	8.91 (.95)	7.00 (2.90)	37.73 (7.90)	3.00 (1.79)
Pakeha (n=80)	2.33 (3.05)	69.06 (11.95)	31.40 (6.43)	11.74 (3.19)	10.41 (3.60)	9.25 (1.74)	4.94 (2.63)	33.68 (12.08)	2.49 (2.31)
P I (n=4)	3.00 (5.35)	68.50 (7.72)	26.50 (5.45)	11.00 (3.83)	7.50 (1.00)	8.00 (1.41)	3.25 (.50)	22.25 (5.56)	1.50 (1.29)
Other (n=6)	1.17 (2.40)	58.33 (8.64)	26.67 (5.54)	9.50 (1.76)	9.17 (2.32)	8.00 (2.00)	3.17 (.41)	28.17 (8.01)	2.67 (1.51)
Time 2									
Maori (n=13)	2.23 (2.86)	73.62 (15.80)	30.08 (4.96)	16.08 (8.48)	10.15 (1.77)	9.69 (2.21)	5.54 (5.73)	43.15 (7.00)	3.62 (4.89)
Pakeha (n=59)	3.53 (3.12)	70.80 (10.63)	30.02 (5.61)	11.34 (3.05)	9.73 (3.51)	8.95 (1.63)	6.83 (4.07)	45.98 (11.76)	2.41 (2.17)
P I (n=2)	6.00 (8.48)	95.00 (.00)	34.50 (13.44)	25.50 (26.16)	13.50 (4.95)	12.00 (5.66)	5.50 (3.54)	44.50 (23.34)	2.00 (0.0)
Other (n=5)	1.40 (2.61)	59.20 (10.26)	27.20 (6.02)	9.00 (1.41)	9.40 (2.19)	8.80 (2.49)	3.00 (.00)	36.80 (8.50)	2.20 (1.79)
Time 3									
Maori (n=9)	4.89 (3.41)	74.22 (15.83)	26.78 (8.97)	13.67 (9.72)	10.22 (3.49)	9.11 (2.03)	7.00 (4.47)	44.22 (8.70)	2.67 (1.32)
Pakeha (n=59)	3.53 (3.12)	70.80 (10.63)	30.02 (5.61)	11.34 (3.05)	9.73 (3.51)	8.95 (1.63)	6.83 (4.07)	45.98 (11.76)	2.41 (2.17)
P I (n=6)	4.33 (5.16)	69.83 (16.30)	33.17 (10.30)	11.67 (3.27)	11.33 (5.16)	10.17 (2.48)	4.83 (2.79)	38.00 (12.02)	4.50 (6.38)
Other (n=3)	4.00 (6.93)	69.67 (14.57)	30.00 (13.86)	11.67 (6.35)	10.67 (6.35)	7.67 (1.16)	4.00 (1.73)	47.00 (19.98)	2.33 (4.04)
Time 4									
Maori (n=4)	1.00 (.82)	111.00 (7.17)	22.50 (5.45)	7.75 (2.87)	9.50 (3.70)	9.00 (1.83)	3.75 (.96)	40.50 (5.57)	15.33 (1.15)
Pakeha (n=15)	1.87 (1.30)	109.93 (6.15)	31.13 (3.50)	9.20 (1.08)	11.07 (1.94)	10.93 (1.39)	6.53 (2.83)	35.73 (4.56)	7.31 (7.17)
P I/Other (n=0)									

*Note.* P I = Pacific Islander

Table 13

*Means and Standard Deviations for total sample, demographic qualifications, at times 1-4.*

Measure → Group ↓	BDI	CMTS	HSCL-TOT	HSCL-PD	HSCL – GFD	HSCL-SD	ITQ	MHI	BHS
<b>Time 1</b>									
None (n=1)	1.00	71.00	33.00	16.00	9.00	8.00	3.00	29.00	2.00
SC (n=28)	1.36 (3.35)	65.46 (11.65)	29.46 (5.36)	11.54 (2.93)	9.29 (3.17)	8.64 (1.31)	5.18 (2.65)	32.75 (12.11)	1.75 (1.11)
UE (n=34)	3.85 (3.05)	75.44 (12.05)	33.74 (6.62)	12.41 (2.35)	11.56 (4.49)	9.76 (2.03)	5.35 (3.18)	36.21 (11.48)	3.59 (2.66)
Dip (n=21)	1.57 (2.38)	62.62 (5.87)	29.29 (5.12)	10.38 (2.58)	9.67 (2.03)	9.24 (1.64)	4.19 (1.12)	27.57 (6.15)	4.19 (1.12)
Uni (n=17)	3.41 (3.68)	71.41 (13.30)	31.53 (8.21)	11.82 (4.72)	11.35 (3.59)	8.35 (1.12)	5.06 (2.93)	35.94 (14.27)	2.18 (2.65)
<b>Time 2</b>									
None (n=2)	6.00 (8.49)	80.50 (20.51)	35.50 (12.02)	27.00 (24.04)	13.00 (5.66)	12.00 (5.66)	5.50 (3.53)	50.00 (15.56)	1.50 (.70)
SC(n=25)	1.76 (3.99)	66.17 (14.16)	27.96 (5.09)	14.40 (10.03)	9.20 (2.02)	8.84 (2.14)	4.48 (2.74)	38.84 (10.78)	2.37 (2.81)
UE (n=26)	3.00 (2.83)	76.73 (13.58)	31.35 (4.59)	14.31 (6.62)	10.35 (2.48)	9.85 (1.99)	5.38 (3.49)	41.88 (9.00)	3.77 (3.77)
Dip (n=18)	2.50 (3.59)	67.61 (10.80)	29.61 (6.90)	13.78 (5.96)	10.94 (4.45)	8.33 (1.46)	4.28 (1.49)	41.94 (10.46)	3.33 (2.11)
Uni (n=13)	2.77 (3.77)	70.15 (9.86)	30.15 (8.67)	11.54 (5.17)	10.23 (3.40)	8.38 (1.26)	4.38 (1.58)	44.08 (11.62)	2.23 (1.48)
<b>Time 3</b>									
None (n=2)	8.50 (6.36)	83.50 (16.26)	42.05 (4.95)	18.00 (5.66)	15.00 (7.07)	9.50 (3.54)	7.50 (3.54)	48.50 (7.78)	9.00 (9.89)
SC (n=25)	2.44 (3.62)	65.16 (11.27)	28.56 (6.43)	11.32 (3.40)	8.84 (3.46)	8.40 (1.41)	6.64 (3.99)	40.60 (11.00)	2.36 (2.14)
UE (n=23)	5.00 (3.12)	72.65 (11.30)	29.35 (7.56)	12.22 (6.09)	10.57 (4.39)	9.00 (1.86)	5.91 (3.12)	47.13 (9.79)	2.70 (2.53)
Dip (n=14)	4.29 (1.54)	74.00 (8.70)	32.07 (3.41)	10.71 (2.46)	10.64 (1.39)	10.71 (1.68)	5.57 (2.79)	43.93 (9.55)	2.36 (2.17)
Uni (n=13)	2.85 (3.74)	74.62 (12.20)	29.08 (7.47)	11.31 (3.71)	9.46 (3.62)	8.31 (.63)	8.62 (5.91)	51.46 (16.05)	2.15 (2.04)
<b>Time 4</b>									
None (n=0)	2.14 (1.10)	110.14 (3.92)	31.43 (3.35)	9.21 (.98)	11.21 (1.93)	11.07 (1.33)	6.86 (2.69)	35.93 (4.67)	5.91 (6.85)
SC (n= 3)	.33 (.58)	105.33 (7.10)	26.67 (3.51)	9.33 (2.08)	8.00 (1.00)	9.33 (1.15)	6.33 (5.77)	35.33 (4.04)	14.00 (1.00)
UE (n=6)	1.00 (.89)	111.33 (6.41)	25.83 (6.85)	8.17 (2.32)	10.17 (3.19)	10.00 (2.19)	4.83 (2.64)	37.83 (6.91)	15.50 (1.00)
Dip (n=9)	2.78 (.44)	109.11 (1.05)	32.67 (2.24)	9.11 (.93)	12.22 (.44)	11.44 (.88)	6.78 (1.56)	35.44 (2.96)	2.50 (4.24)
Uni (n=1)	0.00	127	28	10	9	9	4	46	17

*Note.* None= no formal qualifications; SC = School certificate, UE = University entrance; Dip = Diploma or trade; Uni= University degree.

Table 14

*Means and Standard Deviations for total sample, demographic sworn officer, at times 1-4.*

Measure →	BDI	CMTS	HSCL-TOT	HSCL-PD	HSCL – GFD	HSCL-SD	ITQ	MHI	BHS
Group ↓									
<b>Time 1</b>									
Sworn (n=100)	2.47 (3.08)	69.11 (12.05)	31.20 (6.50)	11.66 (3.13)	10.45 (3.66)	9.09 (1.71)	4.98 (2.67)	33.06 (11.31)	2.53 (2.19)
Non-sworn (n=1)	14	87	36	14	13	9	6	61	1
<b>Time 2</b>									
Sworn (n=82)	2.28 (3.18)	70.10 (12.70)	29.76 (6.25)	13.84 (7.82)	10.13 (3.13)	8.98 (2.01)	4.72 (2.68)	40.96 (9.86)	2.86 (2.63)
Non-sworn (n=2)	14.00 (.00)	97.50 (14.85)	35.00 (1.41)	24.50 (16.26)	12.00 (2.83)	12.00 (1.41)	5.00 (1.41)	64.50 (.71)	7.50 (9.19)
<b>Time 3</b>									
Sworn (n=76)	3.82 (3.45)	71.20 (11.74)	29.87 (6.87)	11.64 (4.43)	9.96 (3.73)	9.00 (1.77)	6.50 (3.95)	45.32 (11.79)	2.63 (2.68)
Non-sworn (n=1)	0	62	31	12	9	10	13	36	.00
<b>Time 4</b>									
Sworn (n=18)	1.78 (1.22)	110.00 (6.32)	29.28 (5.40)	8.78 (1.59)	10.83 (2.41)	10.56 (1.69)	5.56 (2.26)	36.94 (5.09)	8.40 (7.25)
Non-sworn (n=1)	0	113	30	11	9	10	13	33	15

Table 15

*Means and Standard Deviations for total sample, demographic assigned duties (descriptive frontline), at times 1-4.*

Measure →	BDI	CMTS	HSCL-TOT	HSCL-PD	HSCL – GFD	HSCL-SD	ITQ	MHI	BHS
Group ↓									
<b>Time 1</b>									
Frontline (n=84)	2.38 (3.10)	38.27 (11.93)	31.05 (6.70)	11.58 (3.25)	10.48 (3.35)	8.99 (1.71)	4.85 (2.66)	32.87 (11.64)	2.43 (2.12)
Not F-1 (n=16)	3.75 (4.02)	74.38 (12.52)	31.13 (5.55)	12.06 (2.46)	10.38 (5.16)	9.69 (1.58)	5.56 (2.63)	36.13 (11.60)	3.00 (2.56)
<b>Time 2</b>									
Frontline (n=75)	2.23 (3.20)	69.96 (12.90)	29.43 (6.31)	13.99 (8.13)	10.07 (3.19)	8.87 (1.97)	4.68 (2.72)	41.21 (10.09)	2.89 (2.74)
Not F-1 (n=8)	6.00 (5.63)	76.63 (16.87)	33.25 (4.06)	14.75 (8.78)	10.88 (2.53)	11.00 (1.77)	4.88 (1.96)	44.88 (13.64)	3.88 (4.22)
<b>Time 3</b>									
Frontline (n=60)	3.70 (3.48)	70.55 (11.90)	29.73 (7.15)	11.55 (4.88)	9.90 (3.28)	9.22 (1.86)	6.07 (3.94)	44.90 (12.24)	2.57 (2.84)
Not F-1 (n=16)	4.19 (3.49)	72.94 (11.50)	30.19 (5.80)	11.88 (2.06)	10.0 (5.19)	8.31 (1.14)	8.44 (3.85)	46.87 (10.16)	2.75 (2.18)
<b>Time 4</b>									
Frontline (n=17)	1.82 (1.24)	110.35 (6.32)	29.41 (5.54)	8.71 (1.61)	11.06 (2.27)	10.59 (1.74)	5.71 (2.23)	36.76 (5.19)	8.00 (7.35)
Not F-1 (n=2)	.50 (.71)	108.50 (6.36)	28.50 (2.12)	10.50 (.70)	8.00 (1.41)	10 (.00)	8.00 (7.07)	36.50 (4.95)	14.50 (.70)

*Note.* Not F-1 = Not frontline

### *Section two: Scale Characteristics*

In order to examine the internal consistency of each measure the Cronbach alpha coefficients (Cronbach  $\alpha$ 's) were generated for protégé(e)s, mentors and total sample at times 1, 2 and 3, on the BDI, CMTS, HSCL, ITQ, MHI and BHS. These coefficients are presented in Table 16.

Table 16

*Reliability coefficient- $\alpha$  of BDI, CMTS, HSCL, ITQ, MHI, and BHS.*

	BDI	CMTS	HSCL	ITQ	MHI	BHS
Time 1						
Mentor	.76	.88	.75	.87	.89	.59
Protégé(e)	.83	.85	.85	.59	.95	.51
Total	.80	.87	.82	.79	.93	.56
Time 2						
Mentor	.89	.90	.84	.85	.93	.83
Protégé(e)	.80	.85	.83	.75	.93	.50
Total	.85	.88	.83	.80	.93	.74
Time 3						
Mentor	.69	.87	.82	.88	.89	.81
Protégé(e)	.75	.83	.82	.85	.94	.65
Total	.74	.85	.83	.87	.93	.73

Note: Cronbach- $\alpha$  Nunally and Bernstein (1994) states .70 or better for significance.

As can be seen in Table 16, reliability coefficients for the BDI, CMTS, HSCL, ITQ, MHI and BHS ranged from .51 to .95. These were considered within an

acceptable range with the exception of those for the BHS. Nunnally and Bernstein (1994) believe that Cronbach's alpha should be .70 or better in order for a measure to be considered reliable. BHS for mentors and protégé(e) at time 1 and protégé(e)s at time 2 ranged from .50 to .65, which brings the reliability of this measure into question. Overall, reliability was high with scores for the total sample being above .70 with the previously mentioned exception of time 1 and 2 for the BHS.

### *Section three: Group Comparisons*

Two one-way analysis of variance (ANOVAs) were performed to determine whether the four groups were equivalent on the following demographics: age, gender, sworn, frontline, marital status, ethnicity, years in Auckland, years of service, and scholastic achievements. No significant differences were found in the demographic variables ( $p > .05$ ).

In order to determine whether the protégé(e)s and mentors in experimental group 1 and control group 1 were equivalent in their performances at the pre-test, two one-way ANOVAs were performed. As noted in the design section, the researcher can determine from this comparison whether change is due to the independent variable (i.e., treatment), though pre-testing effects need to be ruled out by further analyses. For the protégé(e)s, a one-way ANOVA was performed with group (i.e., experimental versus control) as the grouping variable, and pre-test (time 1) performances on the BDI, MHI, HSCL (total and three sub-factors - GFD, SD and PD), intent to quit, BHS and CMTS as dependent variables. A significant difference was found comparing the two groups on the MHI total score,  $F(1,60) = 4.418$ ,  $p = .04$ , with the experimental group producing a higher mean MHI total score ( $M = 35.63$ ) than the control group ( $M = 29.34$ ). None of the other measures differed significantly for protégé(e)s ( $p > .05$ ).

The same analysis as described above was then performed for the mentors. Comparison of experimental and control groups at pre-test (time 1) revealed significant differences on HSCL - GFD (General Feelings of Distress sub-scale),  $F(1,37) = 5.417$ ,  $p = .03$ ; HSCL total score,  $F(1,37) = 4.746$ ,  $p = .04$ ; and ITQ,  $F(1,37) = 10.00$ ,  $p = .00$ . Examination of mean performances on these measures (see Table 6, p.95) indicates that mentors in the experimental group reported fewer general feelings of distress (HSCL-GFD,  $M = 10.51$ ,  $SD=3.71$ ), better overall symptom performance (HSCL-TOT,  $M = 32.27$ ,  $SD=5.60$ ), and a lower intent to quit ( $M = 5.72$ ,  $SD = 2.41$ ) than those who were in the control group (HSCL-GFD,  $M = 17.00$ ,  $SD = 7.07$ ; HSCL-TOT,  $M = 41.00$ ,  $SD = .00$ ; ITQ,  $M = 12.50$ ,  $SD = 10.60$ ). None of the other comparisons were significantly different for the mentors ( $p > .05$ ).

In following the advantages of a Solomon Four Group design, two further one-way ANOVAs were performed to compare performance of the experimental group 1 and control group 2 at time 2 to determine whether the above findings were due to the presence of a pre-test. The independent variable was group and the dependent variables were the various sub-scales of the Combined Measures Questionnaire (including BDI, MHI, HSCL [total and three sub factors], intent to quit, BHS and CMTS) but at post-test (time 2). The protégé(e)s in the two groups did not differ significantly on any of the dependent variables, indicating that the presence of a pre-test had no impact on later performance ( $p > .05$ ). As a result of this analysis, the two treatment groups and two control groups were combined for further analyses.

The comparisons allowed by Solomon Four Group design were followed through, to determine whether the independent variable had an effect separate from the interaction with the pre-test performance. The performance of control group 2 was compared to that of control group 1 using an ANOVA with BDI, HSCL (total and

three sub-factors), BHS, ITQ, CMTS and MHI as dependent variables. The findings indicate that for mentors HSCL – GFD,  $F(1,8) = 8.424$ ,  $p = .02$ , differed significantly, while for protégé(e)s there were no significant differences between the groups.

Finally in Solomon Four Group design if group 2 and group 4 show no change but group 1 shows change, then the change is said to be produced only by the interaction of pre-tests and treatment. For mentors this comparison could not be made as there were not enough data at time 2.

For protégé(e)s there was a significant change in BDI,  $F(1,12) = 4.892$ ,  $p = .04$ , but no significant interaction (i.e., no significant differences between groups 2 and 4 in amount of change). Examination of means (Table 8, p. 96) indicates protégé(e)s in the control groups were marginally more depressed over time. There was no significant difference (no change over time or interaction where  $p > .05$ ) for CMTS, HSCL (total and subscales), ITQ, MHI, and BHS. For mentors there was no significant difference found ( $p > .05$ ).

The above analyses indicate that for both the mentors and protégé(e)s, performances of experimental group 1 and control group 1 were equivalent at pre-test, allowing any findings when comparing post-tests of the two groups to be attributed to the presence of treatment rather than any pre-existing group differences, or the presence of a pre-test.

#### *Section Four: Between Group and Within Subject Comparisons*

Given the above findings that the pre-test had no significant effect on performance, between and within group comparisons were carried out. Due to the small number of participants at time 4, analysis at time 4 was not able to be considered.

This section outlines the comparison between those who received a mentor (experimental) and those who did not (control) at the six month mark (when the official mentor relationship terminated), with groups 1 and 3 combined and groups 2 and 4 combined. This was followed by within subject comparisons of change across time and analysis of each of the measures of interest across measures.

In comparing post-test performances a one-way ANOVA was conducted with experimental versus control as the grouping variable and post-test performances on BDI, MHI, HSCL (total and three sub factors), ITQ, BHS and CMTS as dependent variables. This analysis was performed separately for mentors and protégé(e)s. There were no significant differences ( $p > .05$ ) on any of the measures for protégé(e)s. For the mentors a significant difference was found for HSCL-PD (Performance Difficulty),  $F(1,26) = 5.365$ ,  $p = .03$ , and HSCL-GFD (General Feelings of Distress),  $F(1,26) = 6.151$ ,  $p = .02$ . Examination of mean differences indicates that mentors had lower levels of PD ( $M=11.8$ ,  $SD=2.93$ ) and GFD ( $M=9.8$ ,  $SD=3.37$ ) if they mentored, than if they attended mentor training but did not provide mentoring (PD -  $M = 19.33$ ,  $SD = 3.37$  and GFD -  $M = 15.33$ ,  $SD = 6.11$ ).

To examine change over time a series of comparisons of within subject changes was performed using a general linear model repeated measures contrast design. The first set of contrasts involved comparisons of pre-test and post-test performances across the following measures: BDI, CMTS, HSCL (total and three sub-factors), ITQ, MHI and BHS. To determine whether within subject change differed as a result of the mentoring relationship, the between subject factor group (i.e. experimental group 1 versus control group 2) was included. As with all previous analyses this was performed separately for mentors and protégé(e)s.

For mentors no significant differences between pre-test and post-test performances were found on any of the measures, nor were there any significant interactions between time and group ( $p > .05$ ). For protégé(e)s there was a significant within subjects effect for BDI,  $F(1,18) = 4.706$ ,  $p = .04$ . Comparisons of pretest and post test means for protégé(e)s on the BDI indicated a very slight increase in reported depressive symptomatology over time (pretest  $M = 2.37$ ,  $SD = 3.45$ ; post-test  $M = 3.0$ ,  $SD = 3.16$ ). There was no statistically significant between groups interaction in terms of change on this measure. In addition, there was a trend toward significance between pre-test and post-test for protégé(e)s on MHI,  $F(1,18) = 4.284$ ,  $p = .05$ . Mean pre-test and post-test performances for protégé(e)s on the MHI were  $M = 31.77$  ( $SD = 11.78$ ) and  $M = 36.31$  ( $SD = 13.00$ ) respectively, indicating a decrease in positive well-being from pre-test to post-test. That there was no significant interaction between time and group, indicates similar levels of change for both the experimental group 1 and control group 2 protégé(e)s. None of the other comparisons were significant ( $p > .05$ ).

Further comparisons were carried out by using one-way ANOVAs as previously described. The two experimental groups were combined and a general linear model repeated measures comparison was carried out, comparing time 2 and time 3 (i.e. assigned mentor vs. after mentoring post-test). No significant difference was found for mentors or protégé(e)s ( $p > .05$ ) on BDI, CMTS, MHI or BHS measures, indicating no detected difference in depression, PTSD symptomatology, positive well-being and hopelessness.

The HSCL scores for mentors show a trend toward significance,  $F(1,10) = 4.802$ ,  $p = .05$ . The HSCL mean score rose from 30.3 to 31.24. There was no significant difference ( $p > .05$ ) found for protégé(e)s on this measure.

The ITQ scale comparison was significant for mentors,  $F(1,10)= 7.427, p=.02$ . The mean score for the ITQ rose from 5.45 to 8.13 at six months, indicating the mentors showed a higher score for intent to quit over the six month period of mentoring.

### *Section Five: A priori and post hoc power analyses*

As previously summarised in the method section (pp. 84 - 87) a priori power analyses were carried out to calculate optimal sample size (Cohen, 1988; Glass & Hakstian, 1969). The analysis revealed that a total sample size of 100 for the protégé(e)s and 50 for the mentors (based on 4 and 2 groups respectively), in order to have enough power to detect 80% of true effects.

The programme GPower (Erdfelder et al., 1996) was used to conduct post hoc power analyses, assuming a normal distribution. The calculations were a simplified (approximate) power analysis for ANOVA. For the purpose of these pair-wise analyses the alpha value was set at .01 (due to multiple ANOVAs being performed). The maximum statistical power for pair-wise analyses was .98 for groups at time 3. The statistical power was found to be in the range of .01 to .98, however only two analyses for the mentors were above the recommended .8 and no protégé(e) analyses were above .8 (Cohen, 1988). Over 90% of the results for the power analyses were below .5. This indicates that most of the inter-group analyses do not have the statistical power recommended by Cohen (1988).

### *Section Six: Mentor Relationship Questionnaire analysis*

Following on from the initial quantitative exploration of this stress-strain model of the mentor-protégé(e) relationship, a more open perspective was explored at the six-month time frame. This was achieved with the use of the Mentor Relationship

Questionnaire which contained open-ended questions given in alternative form depending on whether mentor or protégé(e) (see Appendices B and C).

As previously stated part of the support offered to mentors was a group session where the researcher acted as facilitator and support person once every six to eight weeks. During the session at six months, the questions covered by the Mentor Relationship Questionnaire were discussed in a group forum. These sessions were recorded and transcribed. Alternatively mentors could fill in the questionnaire and post it back as the protégé(e)s did. In addition to this questionnaire mentors were asked whether the mentor package met their needs for the six month mentor relationship. There was an overwhelming agreement that the package did meet the needs of the mentor with 48 of the 50 (96%) replying definitely, one mostly and one who said it almost met their needs. There were no replies that said the package was inadequate. This was similar to the feedback from the training day when all mentors who filled out the feedback form (98% - 57 of a possible 58) said the mentor package met or exceeded their needs and expectations for the training day.

Answers to the Mentor Relationship Questionnaire were categorised according to clear themes. An analysis of content (Neuendorf, 2002) was performed by reading all the responses several times and then considering how answers with similar thematic content were clustered together. It was found that answers fell into five main categories: yes/good; neutral; no/no good; not needed; and not able to be assessed. Having identified these broad categories the information was re-classified and assigned to these categories.

It was apparent from participant responses that both groups (protégé(e)s and mentors) were committed and felt the relationship was useful. The results are summarised in Table 11 (p. 110). In total 50 of a possible 58 (86% return rate)

mentors' questionnaires were returned or answered in person. In total 56 of a possible 90 (62% return rate) protégé(e)s' questionnaires were returned. Not all returns were complete. It was noted that the return rate for the Combined Measures Questionnaire was far lower at the six-month mark than these return rates. When considering the Combined Measures Questionnaire, protégé(e)s in groups 1 and 3 had return rates of 25% and 18% respectively at time 3, and mentors in group 1 and 3 had return rates of 36% and 30% respectively.

### *The training package feedback*

The training package drew on many authors and styles to try to give a comprehensive day's training, which would adequately prepare the mentor for their experience. Feedback was invited at the end of the training day and also at the six-month period on whether this package was adequate preparation for the experience. At both times the feedback affirmed that the package was adequate (96%) and in fact exceeded the participant's expectations in 98% of the feedback forms. The return rate for the feedback form was 100% on training day and 86% at six months.

### *The Mentor-Protégé(e) Relationship*

When considering the mentor-protégé(e) relationship, the differing expectations of mentors and protégé(e)s were indicated by their responses. For example to the question “What is your evaluation of the mentoring relationship?”, mentors commented “they did not seem to need me – it felt like a waste of time yet when I contacted them they said they had had enough contact”, compared to protégé(e) quotes such as “knowing there was someone there was all I needed”. Of the responses from the mentors 17 were ‘good’, eight were ‘neutral’ (“it was OK”) and 13 were ‘no/no good’ (e.g., “there was no relationship”). Thirty two of the protégé(e)s reported that the relationship was ‘good’ and 16 reported that the relationship was ‘no good’.

Question 2 of the Mentor relationship Questionnaire quantified the number of meetings between mentor and protégé(e), which on average was three or fewer sessions (hours). Eight mentors reported having never met with the protégé(e) and 12 protégé(e)s reported never meeting the mentor (the difference in numbers is due to this not being a dyad analysis and there was a set of people who did not respond to the questionnaire). Twenty-two mentors and 20 protégé(e)s reported that they had one meeting, ten mentors and eight protégé(e)s reported two meetings, eight mentors and seven protégé(e)s reported three meetings, and two mentors and three protégé(e)s reported more than three meetings. This indicates that the outcomes measured by the mentor relationship questionnaire occurred within a small amount of contact time.

#### *Commitment.*

Commitment as perceived by the other party was explored with the question “How committed did your protégé(e)/mentor seem to the relationship?”

Responses varied between mentor and protégé(e), with mentors' comments in relation to the protégé(e) - "initially very, subsequently does not seem to have felt the need for further contact" compared to protégé(e)s who saw the mentors as "always available", and "very committed".

*Mentor responsibilities.*

The questionnaire then had seven questions that were designed to explore aspects of the relationship where the responsibility was deemed to be the mentor's. These areas included communication, culture, feedback, career development, provision of information and organisation workings.

Communication was assessed with the question "Did you/your mentor encourage two-way exchange of information and act as a sounding board for ideas?". Mentors were brief in their responses with either "yes" or "no". Protégé(e)s used similar terms such as "definitely", "most of the time" and "when I could get hold of him/her".

Participants were asked their perceptions about organisational culture. For example "Did you ..." compared to "Did your mentor ..." "help to interpret and clarify the organisational culture, political structure and vision?". The protégé(e)s' responses were brief. For example "yes, definitely" or "no" or "never needed". Mentors explained situations such as "yes- initially very bewildered, told very little re where he would be posted etc. so helped out here."; "Gave the low down on who to speak to, what to ask etc."; "Crash course on CYA<sup>16</sup> and let him know this was normal - seems to have done the trick".

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<sup>16</sup> CYA = Children and Young Persons Act

Answers in relation to the question, “Did you/your mentor give specific feedback and act as independent third party to clarify thinking on items such as performance goals and developmental needs?”, ranged from short answers to answers with examples. Answers from the protégé(e)s were short: “yes”, “no”, “not needed”, while mentors provided examples such as “The performance goal was to survive the first week and yes he did”.

The Career development question posed was: “Did you/your mentor provide information about career opportunities and suggest strategies?” Mentors and protégé(e)s provided similar answers with “yes in relation to IST<sup>17</sup> modules”. Mentors identified a time when protégé(e)s seemed to change their focus, which was at about three months when the response was “where to from here?”.

To the question on sources of information: “Did you tell your protégé(e) about other places to obtain information?” with the alternate question “Did your mentor tell you about other places to obtain information?” responses were short, for example ‘yes’ or ‘no’ from both groups.

Organisational culture was explored by the question: “Did you expand your protégé(e)’s...”, with the alternative “Did your mentor expand your... understanding of the workings of the organization?”. Answers were concise, with mentors saying ‘yes’ or ‘no’ and protégé(e)s a little more enthusiastically stating ‘yes definitely’ and ‘without a doubt’.

Whether mentoring was a confidence building experience was investigated with “Have you gained more confidence and a better understanding of your contributions through this relationship? What about your protégé(e) – did they gain more confidence?” and the protégé(e)s’ equivalent form “Did you gain more

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<sup>17</sup> In-service training

confidence and a better understanding of your contributions through this relationship”.

Confidence is an area where both groups achieved some positive outcome from the relationship. Protégé(e)s' responses were 'yes' or 'no'. Mentors gave examples such as 'Yes - I was surprised how much knowledge I'd acquired from more experienced staff, how much I'd remembered and that I could condense it into one phone conversation', 'Yes- for the protégé(e)' and 'Yes subsequently met protégé(e) and protégé(e) was now very confident'.

To the question “Do you have more insight and ways to solve problems as a result of this relationship?” Responses to the benefits of problem solving appear to have been limited for the majority of either protégé(e)s or mentors, although some (8%) reported benefits in this area.

Mentors had an extra question that was not put to the protégé(e)s, “What other roles did you fulfil for your protégé(e)?” In five of the 40 responses to this question counsellor was identified and 35 of the respondents said that no other role was filled.

As can be seen in Table 17 (p. 121) for those who chose to answer particular questions there are more positive than negative responses.

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.*

Question	Protégé(e) Yes/good	Mentor Yes/good	Protégé(e) Neutral	Mentor Neutral	Protégé(e) No/no good	Mentor No/no good	Protégé(e) No need	Mentor No need	Protégé(e) Unable to assess	Mentor Unable to assess
1 Relationship	32 (64%)	17 (34%)	--	8 (16%)	16 (32%)	13 (26%)	2 (4%)	12 (24%)	--	--
3 Commitment	45 (90%)	27 (54%)	5 (10%)	18 (36%)	--	--	--	--	--	5 (10%)
4 Communication	40 (100%)	30 (75%)	--	--	--	10 (25%)	--	--	--	--
5 Culture	20 (57%)	28 (65%)	--	--	6 (17%)	7 (16%)	9 (26%)	8 (19%)	--	--
6 Feedback	8 (23%)	17 (100%)	--	--	15 (43%)	--	12 (34%)	--	--	--
7 Career	24 (75%)	20 (50%)	--	--	--	--	8 (25%)	20 (50%)	--	--
8 Information	14 (44%)	28 (67%)	--	--	18 (56%)	14 (33%)	--	--	--	--
9 Organisation	12 (52%)	25 (83%)	3 (13%)	--	8 (35%)	5 (17%)	--	--	--	--
10 Confidence	14 (44%)	22 (100%)	8 (25%)	--	10 (31%)	--	--	--	--	--
11 Problem-solving	8 (33%)	8 (35%)	--	--	16 (67%)	15 (65%)	--	--	--	--

Note: Dashes indicate zero responses. Question 2 was excluded as it related to the number of meetings held and was not analysed by content analysis. Question 12 was also excluded as it only applied to mentors.

## CHAPTER 5

### Discussion

For the New Zealand Police to function effectively, the organisation relies upon its human resources. It is therefore important not only to the individual but also to the organisation that an understanding be developed of how stressors affect an individual's functioning, and to determine ways in which the organisation can best support those entering the organisation. With the support of New Zealand Police Management, the author of the current study introduced a formal psychosocial mentoring programme to aid the induction of Probationary Constables into their new career.

In the current study, stress was explored through a stress-strain path model (see Figures 1 & 3, pp.15 & 41 respectively) with outcome variables of psychological well being, depression, PTSD, hopelessness, psychological distress, and intent to quit. The mentor relationship itself was evaluated with the aid of the Mentor Relationship, a questionnaire designed to measure the benefits of the mentor relationship.

The basics of psychosocial mentoring are that the mentor provides support in the form of confirmation, role modelling, counselling, acceptance, and friendship (Kram, 1985, 1986; Noe, 1988 ). Generally, social support has been found to have a beneficial effect on health and affective outcomes (Fusilier et al., 1986, p. 152) and formal programmes tend to fill the psychosocial niche of the mentor relationship (Chao & Walz, 1992; Noe, 1988). Siegel and Reinstein (2001) found that mentoring was a good mediator for stress when an organisation was in turmoil, such as during mergers and restructuring. The New Zealand Police could be described in this way at the time of the current research, in that organisational restructuring had just occurred. It was anticipated that a

formal psychosocial mentoring programme would act as a mediator to stress in these circumstances. Two hypotheses were formulated to test this.

The first hypothesis that 'Participation in a mentor – protégé(e) relationship will result in better psychological well-being and lower intent to quit than those who do not have this relationship' was investigated using the Combined Measures Questionnaire consisting of six published measures.

*Hypothesis 1: Mentoring, psychological well-being and intent to quit*

The first hypothesis was that levels of psychological well-being in relation to both the mentors and protégé(e)s. As this was a longitudinal experimental design, consideration was given to both between–group comparisons and within–subject change over time.

When reviewing the literature on clinical populations during the planning stage, the research was inconclusive as to the impact of mentoring, however, the expectation was that reduced depressive symptoms would be found in the mentored population in the current study. Rhodes et al. (1992), Hibbard et al. (2002), and Queen (1994) found reduced depressive symptoms to be associated with mentoring, while other authors, such as Zimmerman et al. (2002), found that mentoring had no effect on depression scores.

Information from the New Zealand Police Welfare section<sup>18</sup>, the New Zealand Police Psychologist (Miller, 1990) and authors such as Stephens (1996) agree that, in regards to psychological well-being (i.e., PTSD) in the New Zealand Police, a number of clinically significant signs and symptoms would be found among the sample of New Zealand Police Officers. Therefore, when considering instruments for the current study it

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<sup>18</sup> The welfare section is the internal counselling service offered to staff.

was decided to include clinical ones (e.g., Civilian Mississippi Trauma Scale, Beck Depression Inventory). In addition to depression and PTSD, the current study included a specific measure of hopelessness. This was included due to the links between hopelessness and suicide in the literature and due to the recent suicide of a Probationary Constable. Measures of distress were included in order to assess the general psychological well-being of participants beyond what would be measured by clinical assessment tools which are geared toward pathological levels of distress. Finally, intent to quit was assessed because the New Zealand Police Summit had identified attrition from the Police as an area of concern that may be addressed through mentoring.

For protégé(e)s in the current study, the only statistically significant change was on depression, which increased but not at a clinically significant level. As noted previously some studies found reduced depressive symptoms associated with mentoring, while others found mentoring had no effect on depression scores (Hibbard et al., 2002; Queen, 1994; Rhodes et al., 1992; Zimmerman et al., 2002). The current study fits within the later findings with no clinically significant difference found on depression scores as a result of the mentor relationship. A symptom of depression that has been linked in the literature to suicide is hopelessness. In the current study hopelessness also did not change significantly as a result of mentoring. This finding adds to the limited literature on hopelessness (e.g., Keating et al., 2002), whose authors found no link between mentoring and hopelessness.

Stephens (1996), in her study of the New Zealand Police, found that 7% of NZ Police suffer from PTSD. Although, theoretically, a reduction in symptoms through social support was expected (Stephens & Long, 2000), the current study's findings would fit

with other research such as Gallagher (1999) who found that social support did not provide significant predictors for level of PTSD symptoms.

In a related area – critical incident stress, Chase (2004) found that when trying to predict police officer burnout she considered critical incident stress and exposure of officers to these types of incidents. Chase also considered death anxiety, which she quoted as “a globally defined concept that pertains to anxiety associated with death in general and death of oneself or others in particular (Roshdieh, 1996, p.13)” (Chase, p. 9). She found death anxiety accounted for 20% of the variance in burnout exhaustion and cynicism. Chase pointed out the importance of support systems to reduce the risk of burnout. The support systems identified included access to training, counselling and departmental support. Like the current researcher, Chase identified the difficulties in the use of self-report measures in a culture which is not conducive to showing weakness and also what is emotionally distressing to one officer may not be distressing to another.

In the current study, though no change was found for the protégé(e)s, for the mentors, two aspects of psychological distress (Performance Difficulty, General Feelings of Distress) decreased significantly. In general, as a result of psychosocial support a decrease is usually reported in distress (Hart, 1994; Mears, 2002; Sigler & Wilson, 1988). However, although these between group analyses were statistically significant (HSCL-Performance Difficulty [PD],  $p = .03$  and HSCL-General Feelings of Distress [GFD],  $p = .02$ ) in the current study, these results are tempered by the small number in the control groups ( $n=2$ ).

The current author theorized that added social support could help to reduce intent to quit. Burke and McKeen (1996) examined mentoring in the induction process of a

business environment. Burke and McKeen found that protégé(e)s had significantly greater intention to quit their organizations at the end of the period of study. It was therefore encouraging in light of this, that intent to quit scores were similar for the protégé(e)s whether they were mentored or not. However, analysis of within–subject change found that the mentors' intent to quit had increased over the time of the relationship ( $p = .02$ , with an intent to quit change from  $M = 5.45$  to  $8.13$ ). Why this difference has occurred provides an interesting area of exploration for future research with a larger number in the control group/s for the mentors. In relation to attrition in this study authors have theorized about some causes of participant withdrawal. For example, withdrawal could be the result of natural attrition within the organisation (the longer a person has been in an organisation the more likely they are to leave), or organisational change (the new structure/system no longer suits the individual). Perhaps the experiment itself may have had a demoralising effect on the mentors increasing their intent to quit, however, this last theory seems less likely given the level of involvement participants committed to and achieved.

The results of the means for the sample as a whole and by the various demographics also showed no significant difference between the various groups (see Tables 10-15, p 102 - 107). There were no trends or differences apparent when considering these results as outlined in Tables 10-15. When considering the police sample as a whole these results also indicate that the participants in general were not depressed, hopeless, intending to quit, and had good psychological well-being.

Overall, it was unexpected that in the current study the results from the Combined Measures Questionnaire, (which had been designed to target variables of interest such as

depression, hopelessness, psychological distress, general psychological well-being and intent to quit, as indicated by the literature), showed no or minimal difference between control and experimental groups. This could be due to several factors, the most obvious being that the current the author contrasted two police (i.e., non-clinical) samples, which may have reduced variability in responding to questionnaires designed to detect clinical levels of difficulty. The lack of clinical levels of difficulty in the two samples was unexpected as Miller (1998) had indicated that the police can be considered 'of psychological concern'. Specifically, clinical tools such as the BDI have floor effects, which may not allow for enough change at sub-clinical levels. In addition, many clinical measures include items that allow the clinician to determine whether diagnostic criteria have been met. Thus, these measures may not include assessment of other aspects of distress that do not directly reflect diagnostic criteria. As such, in future research it would be reasonable to choose tools such as the Affectometer 2 (Kammann & Flett, 1984) that are designed to measure a more general well-being construct. Further, response biases may have influenced findings. For example, despite assurances of confidentiality and anonymity it is possible that respondents presented themselves in the most positive light in regard to symptoms and intent to quit due to fears that expressions of symptoms or intent to quit could have an impact on their future progress within the Police.

### *Hypothesis 2: Exploration of the success of the Mentor Relationship*

Authors of early research indicated that mentoring has many positive effects, including improvement in career development, reducing distress, motivating staff, and can provide psychosocial support for staff (Barnett, 1995; Bell, 1996; Cooper, 1990; Cunningham, 1993; Fagenson, 1989, 1992; Kram, 1985, 1986; Ragins & Cotton, 1991;

Ragins et al., 2000). Although the current study is less conclusive with respect to psychological well-being, more positive findings emerged with respect to the relationship and the mentoring experience as measured by the Mentor Relationship Questionnaire. To explore the second hypothesis that 'mentors and protégé(e)s will derive positive benefits from their relationship', a questionnaire consisting of open ended questions (the Mentor Relationship Questionnaire) was distributed at the end of the experimental period. The Mentor Relationship questionnaire was designed to measure the perceived value of mentoring.

In the current study there were positive gains as a result of the mentor relationship which were not captured by the Combined Measures Questionnaire. Those aspects explored by the Mentor Relationship Questionnaire were: the relationship, number of sessions, commitment of parties, communication, culture, feedback, career, where to find information, and information about the organisation. As can be seen in Table 17 (p.121), 63.1% of the protégé(e)s and 66% of the mentors returned responses that were positive in relation to the various aspects the mentor relationship being good or helpful (questions 1-10). Neutral and negative responses were less frequent, with 26% of the mentors' responses were neutral and 11.5% of the protégé(e)s' responses being neutral; 23.4% of the mentors were negative and 33.4% of the protégé(e)s were negative. It is clear from these results that there were positive factors relating to the relationship itself, which were not captured by the Combined Measures Questionnaire. It is difficult to interpret these data further as they relate to relationship dynamics and dyads, which were not considered in this project. This project was a group investigation and the author did not assess the information of agreement or difference between individual mentor - protégé(e) contacts.

The qualitative aspects of individual relations were not explored. The importance of the dynamics of this dyad deserves further exploration to understand the relationship itself rather than simply the individual assessment of such relationships.

In relation to these results a promising aspect of the current study is that this positive effect noted by both protégé(e)s and mentors was developed within the context of a relatively short time frame. Mentors and protégé(e)s reported similar contact time/sessions, which were on average 1-3 sessions with 50% of contact time being 1 session and only 4% more than 3 sessions.

Fagan (1985) studied the perception of a field training officer programme (a peer-like mentor relationship) in Police in the United States of America. Fagan, like the current researcher, found that most protégé(e)s described the relationship as fulfilling and useful. Another positive point brought out by the current research was that the existence of the programme was enough in some cases, for example responses from 5 protégé(e)s who had not actually met their mentors “it was enough to know someone was there”.

It was encouraging that result from the mentor relationship questionnaire were similar to those of Dymock (1999) and Campbell and Campbell (2000), who found that as a result of the mentoring relationship, both mentors and protégé(e)s feel that they are benefiting and have a better understanding of the culture/organisation.

#### *How effective was the mentor training package?*

The training package itself was effective in both training the mentors and also preparing them for the mentor relationship. This was assessed by the use of a feedback form both at the end of the mentor training day, and at the end of the six month mentoring period (see Appendices K & L respectively). These forms were designed to evaluate

whether the training itself was adequate and whether it had prepared the mentors for their experience. At the end of the mentoring period, of an 86% return rate, 98% of the returns were positive about the training package. Further, to this 75% of the positive feedback indicated that the package exceeded expectations at both the training day and also at the end of the period.

*Participation and Attrition.*

During the planning phase of the current study extraneous variables and how they might have an impact on the study were considered and steps were taken to try and minimise these effects (Campbell & Stanley, 1963; Mitchell & Jolley, 2001). Utilising the Solomon Four Group design allowed such threats to validity as history, regression, maturation, testing, instrumentation, and interactions of these factors with each other to be ruled out.

During the planning of the current study, the following points from Dillman (1978) were used. Before the experiment began, support from the organisation was gained, consultation took place in the initial planning, and a non-monetary reward was negotiated (i.e., recognition by the Police of mentoring as a positive factor to be considered in CVs, job application, and promotion).

In the current study all potential participants were approached 'face-to-face' and given the opportunity to participate. Thus reducing the pre-inclusion attrition/selection bias for the protégé(e)s (Flick, 1988). This resulted in 65% of those protégé(e)s approached participating in the mentor programme and of this population 90% agreed to participate in the study. Of the 75 mentors who took part in the mentoring programme, 74 (99)% agreed to participate in the current study.

On induction day post-inclusion attrition was minimised by providing information in person and in written format, allowing time for responses and providing written information (Flick, 1988). Other ways that the author tried to reduce attrition were that the questionnaire had prepaid, preaddressed envelopes, and following each mail-out two reminder notices were sent and one reminder phone call was made. Even with this careful planning a self-selection bias at six months was a factor in possible extraneous variable effects to the current study.

Although every effort was made to increase return rate, the rates of attrition were between 50 and 70% (return rate of 30 - 50%) for mentors, and 66 and 82% (return rate of 34 - 18%) for protégé(e)s at the end of the experimental period (time 3) in the current study are at the lower end of the generally expected rate in the literature (Dillman, 1978; Mason, 1999). This could therefore be considered a confound to the interpretation of results for the Combined Measures Questionnaire. Especially as post hoc analyses for power ranged from .01 to .98, with only two analyses above the recommended statistical power value of .8 (Cohen, 1988).

Despite the dropout rate, initial data on protégé(e)s and mentors inform us about the various mental health issues alluded to by Miller (1998). The initial data indicate that the population sampled is likely to be psychologically healthier than believed at the time the study was initiated.

In the current study, some information regarding attrition was gathered during the follow up phone calls. In particular at the six month mark, of those probationary constables who could be contacted, two had left in the six month period (1%), four (2%)

had moved from the Auckland area, and 20 (11%) who said ‘they were too busy/had a lot of surveys to fill in and were sick of it and felt they should withdraw’.

In contrast the return rate for the Mentor Relationship Questionnaire of 86% (14% attrition) for the mentors and 62% (38% attrition) for the protégé(e)s, was within acceptable rates shown in other research (Dillman, 1978; Mason, 1999). Thus adding support for the usefulness of the results from the Mentor Relationship questionnaire and its interpretation. Why the difference between the two return rates, when both questionnaires were in the same envelope? It appears that a conscious choice was made, but without further investigation, this can only be speculated on by thinking of factors that might contribute to attrition. For example, the length of the questionnaire package (12 pages) compared to the qualitative questions (1 page), or the belief the participants had in the mentoring programme and not the symptomatic description/investigation (thus the conscious choice to fill in one and not the other) may have resulted in this discrepancy.

#### *Summary of findings.*

Considering the feedback on the training package and the results of the mentor-relationship questionnaire, it is clear that the relationship was beneficial and the package itself was suitable. It is probable that the causal link model chosen to explore the benefits of mentoring as a mediator is useful, however the means of collecting the data i.e. the use of a journal instead of or as a supplement to self-report measures, could be considered in future research. We have no way of knowing what occurred in the mentor relationship and what exact components provided the social support or otherwise that acted as the beneficial component of the relationship.

It was found that a beneficial relationship can be achieved in 3 or fewer sessions. Therefore a more structured programme, which is mentordriven, and consists of three meetings initially would be appropriate. Ideally the mentors should meet the protégé(e)s on induction day so that these meetings can be scheduled/organised.

The Solomon Four Group design used to investigate the causal link of the mediator model between stressors and strains is a useful experimental design. However due to the lack of difference between the groups at various times, it did not allow for the causal relationship to be explored through the self report measures used. How the mentor package impacted on the participants is unclear and how the relationship itself developed and was used is also unclear. Control over factors that may have impacted on the relationship were outside these self-report measures. Therefore a journal or similar technique may have been able to capture information that is indicated by the results of the quantitative section of this research. Although the full effects of this design were not as useful as it could have been, none the less anyone contemplating similar designs/study would be well advised to use this design because it does take account of pre- baseline information, and the teasing out of pre and post test effects and limiting type 1 statistical errors.

#### *Limitations of this study and directions for future research*

In the population of interest to the current study the expectation was that some of the participants would show pathological areas of symptomatology (Miller, 1998), and this determined the choice of these normally robust and reliable measures that made up the Combined Measures Questionnaire. Due to the minimal symptoms of the participants in the study, floor effects of the instruments reduced the sensitivity of the instruments and

the sub-clinical low scores obtained did not accurately reflecting the more subtle shifts in affect experienced by participants throughout the study.

It is also possible that participation in the programme itself could have had an impact on all participants, however, this effect should have been minimised by the use of the Solomon Four Group design.

The possibility of self-selection bias in this study must be considered. In informal comments made to the researcher by non-participant police officers, it was made clear that there is a subsection of the police who would not see this exercise as valuable and are therefore less likely to volunteer. For example, informal comments made to the researcher about the mentor programme by the more 'old school' officers – “touchy feely rubbish who needs it” and from a couple of middle managers (Inspector level) “it’s a waste of time and resources why should I release staff? ... I won’t release staff”. Therefore it might be reasonable to consider that those willing or able to participate in the study may have somehow differed from those who did not volunteer. At the end of the experimental period a self-selection bias may have, occurred as is supported by the attrition rates of participants over time in relation to the Combined Measures Questionnaire. As suggested above, this may have been due to factors such as the length of the questionnaire.

During the course of the current study I became aware of other research being conducted at the same time and this may have influenced participation in this research (for example at least three mentors and 20 protégés cited this as a reason when they withdrew from my study). As participants had identified the number of studies that they were concurrently participating in affected attrition, perhaps use of a different population

could be investigated or the implementation by management of a limited number of studies being carried out at any one time.

The current author considered both mentors and protégé(e)s; however, protégé(e)s were considered in more detail. One reason for this was that there was a limited number of mentors available, which led to them being allocated to the experimental groups rather than to the control groups, resulting in minimal numbers in the mentor control groups. In future research a larger mentor sample focusing on both groups would allow for greater significance of findings and less likelihood of committing type 2 statistical errors.

In the current study there was no control over the actual mentoring received, (e.g. number of sessions, content or quality of mentoring or meetings). Originally the programme had been designed and requests had been made for both mentors and protégé(e)s to receive training, but due to a change in the operational requirements of the police, staff could not be released for this. Consequently the mentors were trained and the initial meeting between mentors and protégé(e)s could not take place on the staff induction day as planned. The potential influence of this on the ultimate effectiveness of mentoring with this organization requires further investigation.

An assumption of the current study was that being a police officer is stressful however the levels and types of stressors were not investigated in the current study. Future research in the identification of these stressors and the effect these stressors have on the individual in relation to social support structures would be useful. Then studies could pursue levels at which mentoring is useful i.e. whether there is a threshold of stress levels which indicate when social support becomes a mediator in the relationship between stressors and strains.

It would appear that the participants of the current study may have been an unusual cohort compared to those who were the subject of Miller's (1998) report. The period of change Miller refers to had been largely completed by the time this study began. Perhaps protégé(e)s were not exposed to the same levels of stressors due to changes, as had been previously experienced by staff during the restructuring.

A strength of the current study is that it took a proactive approach to issues (stress and lack of support for new staff) that were apparent at the time and aimed at preventive measures rather than fixing the difficulties in the event they became apparent.

*Future research.*

Mentor programmes are becoming more popular in Police departments around the world for example the International Chiefs of Police Desk reference includes mentoring (The Police Chief, 2004); Virginia Police Department (Deck & Juhl, 2004); Las Vegas Metropolitan Police Department, (2005); Knoxville, Iowa Police Department (Sprafka & Kranda, 2004); Boulder Police Department (2001); Strathclyde Police (2005); South Yorkshire Police(2005) however studies such as the current research into their efficacy were not able to be found. The current research is the first study of the effects of mentoring on psychological well-being in the Police in New Zealand and as far as can be ascertained possibly the first internationally. As such, it is not possible to make comparisons with Police units elsewhere. Furthermore, current findings must be considered preliminary due to the small sample size. The consequent increased risk of type 2 statistical error due to low power as a result of attrition, and the need for replication must also be considered. It was unfortunate that, due to operational requirements, at the end of the year allocated research time Police management could no

longer release staff for the purpose of continuing this research. Qualitative information gathered by the author indicated that the mentor training, process and relationship were all beneficial.

There exists an ongoing need for further exploration of the mentor-protégé(e) relationship and its benefits. Future researchers could explore the area of multiple developmental relationships in the mentor context and the evaluation of dyads as well as individual performances. Further studies using general measures of well-being/health and psychological well-being such as Kammann and Flett's (1983) Affectometer 2, may be more sensitive to behavioural and affective changes occurring in everyday lives of police.

Mentoring has been identified as a way to mediate stress (Chao and Walz, 1992; Fusilier et al., 1982), however, in the current study mentoring did not appear to make any detectable difference when assessed quantitatively. Reasons for this are less than clear given the positive comments qualitatively made through the structured interview/questionnaire data. Future research could include measures of specific individual instances of exposure to stressors, which would allow for the variance in induction received and each officer's potential exposure to stressors. For example instances of brawls, working by oneself, counter work, homicide scene guard, exposure to dangerous situations such as life threatening instances with knives and firearms are all part of everyday policing. However, some officers are exposed to this more frequently depending on the duties that they are assigned to and emergencies that occur at that time. These idiosyncratic differences could be usefully incorporated more openly in future work assessing mentoring and well-being.

It is likely that the effects of mentoring might have been more evident if more detailed consideration had been given to the planning and programming of mentor – protégé(e) contact meetings. Future research may benefit from having a minimum of two meetings built into the mentoring programme to ensure that the relationship has a chance to develop. Part of the difficulties facing the mentor-protégé(e) relationship was that initially they did not meet in a one-to-one setting, which may have reduced the ability to establish the mentoring relationship. Therefore, it is suggested that future researchers arrange the initial meeting of mentors and protégé(e)s on the protégé(e)s' induction day, and to ensure that space and time is available for one to one meetings of the dyads. This would allow a better opportunity for relationships to become established and may therefore result in a greater chance of a lasting relationship developing. This particular strategy in the police has not been tried before in a research setting but it is one of the things that was highlighted by participants in this study.

### *Conclusion*

The management of the New Zealand Police were concerned about the psychological well-being and risk of suicide of their new probationary constables, which led to management introducing a more supportive structure for induction. Contrary to data indicating otherwise (Miller, 1998), the current author found that in general the participants were not depressed nor did they have poor psychological well-being or hopelessness, therefore the risk factors for suicide appeared to be low.

Using the Mentor Relationship Questionnaire it was found that there are benefits for both the protégé(e)s and mentors who participated in this programme. It would appear there is sufficient support from the literature and the current study to conclude that it was

a useful part of the induction process. The recommendation would be that it continues to be used within the police in New Zealand, if the current suggestions for enhancing the effectiveness of the mentor-protégé(e) relationship are incorporated.

Despite the difficulties encountered in this study, the study itself and the aims and objectives of the study remain of critical importance to the police. This study has highlighted the importance of preparing mentors well, and ensuring management supports the programme, as without such support these enterprises are made more difficult. Future investigations need to particularly ensure the later points, as without management support the full benefits to be gained from such research may not be achieved. Never the less valuable information has been gained about Probationary Constables, mentors and the use of mentoring in the New Zealand Police.

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# Appendix A

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Combined Measures Questionnaire

**On this part of the questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling in the past week including today. Circle the number beside the statement you have picked. Be sure to read all the statements before you make your choice.**

- 1      I do not feel sad  
       I feel sad  
       I am sad all the time and can't snap out of it  
       I am so sad or unhappy that I can't stand it.
  
- 2      I am not particularly discouraged about the future  
       I feel discouraged about the future  
       I feel I have nothing to look forward to  
       I feel that the future is hopeless and that things can not improve
  
- 3      I do not feel like a failure  
       I feel I have failed more than the average person  
       As I look back on my life, all I can see is a lot of failures  
       I feel I am a complete failure as a person
  
- 4      I get as much satisfaction out of things as I used to  
       I don't enjoy things the way I used to  
       I don't get real satisfaction out of anything anymore  
       I am dissatisfied or bored with everything
  
- 5      I don't feel particularly guilty  
       I feel guilty a good part of the time  
       I feel quite guilty a good part of the time  
       I feel guilty all of the time
  
- 6      I don't feel I am being punished  
       I feel I may be punished  
       I expect to be punished  
       I feel I am being punished
  
- 7      I don't feel disappointed in myself  
       I am disappointed in myself  
       I am disgusted in myself  
       I hate myself
  
- 8      I don't feel I am worse than anybody else  
       I am critical of myself to my weaknesses and mistakes  
       I blame myself all the time for my faults  
       I blame myself for everything bad that happens

- 9         I don't have any thoughts of killing myself  
          I have thoughts of killing myself, but I would not carry them out  
          I would like to kill myself  
          I would kill myself if I had the chance
- 10        I don't cry any more than usual  
          I cry more now than I used to  
          I cry all the time now  
          I used to be able to cry, but now I can't even cry though I want to
- 11        I am no more irritated now than I ever am  
          I get annoyed or irritated more easily than I use to  
          I fell irritated all the time now  
          I don't get irritated at all by the things that I used to irritate me
- 12        I have not lost interest in other people  
          I am less interested in other people than I used to be  
          I have lost most of my interest in other people  
          I have lost all of my interest in other people
- 13        I make decisions about as well as I ever could  
          I put off making decisions more than I used to  
          I have greater difficulty in making decisions than before  
          I can't make decisions at all anymore
- 14        I don't feel I look any worse than I used to  
          I am worried I am looking old or unattractive  
          I feel that there is permanent changes in my appearance that make me  
          look unattractive  
          I believe that I look ugly
- 15        I can work as well as before  
          It takes an extra effort to get started at doing something  
          I have to push myself very hard to do anything  
          I can't do any work at all
- 16        I can sleep as well as usual  
          I don't sleep as well as I used to  
          I wake up 1-2 hours earlier than usual and find it hard to get back to sleep  
          I wake up several hours earlier than I used to and cannot get back to  
          sleep
- 17        I don't get more tired than usual  
          I get tired more easily than I used to  
          I get tired from almost anything  
          I am too tired to do anything

- 18        My appetite is no worse than usual  
    My appetite is not as good as it used to be  
    My appetite is much worse now  
    I have no appetite at all anymore

- 19        I haven't lost much weight, if any lately  
    I have lost more than 5 pounds  
    I have lost more than 10 pounds  
    I have lost more than 15 pounds

I am purposely trying to lose weight by eating less  
Yes .....No.....

- 20        I am no more worried about my health than usual  
    I am worried about physical problems, such as aches and pains; or  
    upset stomach; or constipation  
    I am very worried about physical problems and its hard to think of  
    anything else  
    I am so worried about my physical problems that I cannot think of  
anything else

- 21        I have not noticed any recent change in my interest in sex  
    I am less interested in sex than I used to be  
    I am much less interested in sex now  
    I have lost interest in sex completely

**The following are statements which could describe thoughts you may have had in  
the last month. Please circle the number that best describes how true  
you feel each statement is for you.**

- 22    In the past, I had more close friends than I have now.  
1                      2                      3                      4                      5  
Not at all    Slightly                      Some what                      Very                      Extremely  
true                      true                      true                      true                      true

- 23    I do not feel guilt over things that I did in the past.  
1                      2                      3                      4                      5  
Not at all    Slightly                      Somewhat                      Very                      Extremely  
true                      true                      true                      true                      true

- 24    If someone pushes me too far, I am likely to become violent.  
1                      2                      3                      4                      5  
Very                      Unlikely                      Somewhat                      Very                      Extremely  
unlikely                                           unlikely                      likely                      likely

- 25 If something happens that reminds me of the past, I become very distressed and upset.
- |       |        |           |            |                 |
|-------|--------|-----------|------------|-----------------|
| 1     | 2      | 3         | 4          | 5               |
| Never | Rarely | Sometimes | Frequently | Very frequently |
- 26 The people who know me best are afraid of me.
- |            |             |                |                 |                      |
|------------|-------------|----------------|-----------------|----------------------|
| 1          | 2           | 3              | 4               | 5                    |
| Never true | Rarely true | Sometimes true | Frequently true | Very frequently true |
- 27 I am able to get emotionally close to others.
- |       |        |           |            |                 |
|-------|--------|-----------|------------|-----------------|
| 1     | 2      | 3         | 4          | 5               |
| Never | Rarely | Sometimes | Frequently | Very frequently |
- 28 I have nightmares of experiences in my past that really happened.
- |       |        |           |            |                 |
|-------|--------|-----------|------------|-----------------|
| 1     | 2      | 3         | 4          | 5               |
| Never | Rarely | Sometimes | Frequently | Very frequently |
- 29 When I think of some of the things I have done in the past, I wish I were dead.
- |            |             |                |                 |                      |
|------------|-------------|----------------|-----------------|----------------------|
| 1          | 2           | 3              | 4               | 5                    |
| Never true | Rarely true | Sometimes true | Frequently true | Very frequently true |
- 30 It seems I have no feelings.
- |                 |               |               |           |                |
|-----------------|---------------|---------------|-----------|----------------|
| 1               | 2             | 3             | 4         | 5              |
| Not at all true | Slightly true | Somewhat true | Very true | Extremely true |
- 31 Lately, I have felt like killing myself.
- |                 |               |               |           |                |
|-----------------|---------------|---------------|-----------|----------------|
| 1               | 2             | 3             | 4         | 5              |
| Not at all true | Slightly true | Somewhat true | Very true | Extremely true |
- 32 I fall asleep, stay asleep and awaken only when the alarm goes off.
- |       |        |           |            |                 |
|-------|--------|-----------|------------|-----------------|
| 1     | 2      | 3         | 4          | 5               |
| Never | Rarely | Sometimes | Frequently | Very frequently |
- 33 I wonder why I am still alive when others have died.
- |       |        |           |            |                 |
|-------|--------|-----------|------------|-----------------|
| 1     | 2      | 3         | 4          | 5               |
| Never | Rarely | Sometimes | Frequently | Very frequently |

- 34 Being in certain situations makes me feel as though I am back in the past.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 35 My dreams at night are so real that I waken in a cold sweat and force myself to stay awake.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 36 I feel like I cannot go on.  
 1 2 3 4 5  
 Not at all Rarely Sometimes Very Almost  
 true true true true always true
- 37 I do not laugh or cry at the same things other people do.  
 1 2 3 4 5  
 Not at all Rarely Somewhat Very Extremely  
 true true true true true
- 38 I still enjoy doing many thing that I used to enjoy.  
 1 2 3 4 5  
 Never Rarely Sometimes Very Always  
 true true true true true
- 39 My daydreams are very real and frightening.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very  
 true true true true frequently true
- 40 I have found it easy to keep a job.  
 1 2 3 4 5  
 Not at all Slightly Somewhat Very Extremely  
 true true true true true
- 41 I have trouble concentrating on tasks.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very  
 true true true true frequently true
- 42 I have cried for no good reason.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very  
 frequently

- 43 I enjoy the company of others.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 44 I am frightened of my urges.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 45 I fall asleep easily at night.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 46 Unexpected noises make me jump  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 47 No one understands how I feel, not even my family.  
 1 2 3 4 5  
 Not at all Rarely Somewhat Very Extremely  
 true true true true true
- 48 I am an easy-going, even-tempered person.  
 1 2 3 4 5  
 Never Rarely Sometimes Usually Very much so
- 49 I feel there are certain things that I have done that I can never tell anyone, because no one would ever understand.  
 1 2 3 4 5  
 Not at all Slightly Somewhat True Very True  
 true true true
- 50 There have been times when I used alcohol (or other drugs) to help me sleep or to make me forget about things that happened in the past.  
 1 2 3 4 5  
 Never Infrequently Sometimes Frequently Very frequently
- 51 I feel comfortable when I am in a crowd.  
 1 2 3 4 5  
 Never Rarely Sometimes Usually Always

- 52 I lose my cool and explode over minor everyday things.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently
- 53 I am afraid to go to sleep at night.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Almost always
- 54 I try to stay away from anything that will remind me of things which happened in the past.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Almost always
- 55 My memory is as good as it ever was.  
 1 2 3 4 5  
 Not at all Rarely Somewhat Usually Almost always true  
 true true true true true
- 56 I have a hard time expressing my feelings, to the people I care about.  
 1 2 3 4 5  
 Not at all Rarely Sometimes Frequently Almost always true  
 true true true true true
- 57 At times I suddenly act or feel as though something that happened in the past were happening all over again.  
 1 2 3 4 5  
 Not at all Rarely Sometimes Frequently Almost always true  
 true true true true true
- 58 I am not able to remember some important things that happened in the past.  
 1 2 3 4 5  
 Not at all Rarely Sometimes Usually Almost always true  
 true true true true true
- 59 I feel "super alert" or "on guard" much of the time  
 1 2 3 4 5  
 Not at all Rarely Sometimes Frequently Almost always true  
 true true true true true
- 60 If something happens that reminds me of the past, I get so anxious or panicky that my heart pounds hard; I have trouble getting my breath, I sweat, tremble or shake: or feel dizzy, tingly, or faint.  
 1 2 3 4 5  
 Never Rarely Sometimes Frequently Very frequently



84 How likely is it you will actually leave the Police within the next year?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
Very unlikely Definitely

**These questions are about how you feel, and how things have been with you over the last month. For each question, please circle a number for the one answer that comes closest to the way you have been feeling.**

85 During the past month, how much of the time were you a happy person?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

86 How happy, satisfied or pleased have you been with your personal life during the past month?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
extremely happy extremely unhappy

87 How much of the time during the past month has your daily life been full of things that were interesting to you?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

88 How much of the time during the last month, have you felt calm and peaceful?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

89 How much of the time during the past month, have you felt cheerful, lighthearted?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

90 During the past month, how much of the time have you generally enjoyed the things you do?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

91 How much of the time during the past month, did you feel relaxed and free of tension?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

92 During the past month, how much of the time has living been a wonderful adventure for you?  
1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
All of the time none of the time

- 93 When you got up in the morning, this last month, about how often did you expect to have an interesting day?  
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
 always never
- 94 How often during the past month have you been waking up feeling fresh and rested?  
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
 always never
- 95 During the past month, how much of the time have you felt that the future looks hopeful and promising?  
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
 All of the time none of the time
- 96 During the past month, how much of the time have you felt loved and wanted?  
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
 All of the time none of the time
- 97 How much of the time during the past month, were you able to relax without difficulty?  
 1 ----- 2 ----- 3 ----- 4 ----- 5 ----- 6 ----- 7  
 All of the time none of the time
- 98 Overall how would you rate your general wellbeing at the moment?  
 1 ---- 2 ---- 3 ---- 4 ---- 5 ---- 6 ---- 7 ---- 8 ---- 9 ---- 10  
 The worst it has ever been The best it has ever been

**Here are some statements about the way you see the future. Read each statement carefully. If the statement describes how you think about the future, circle the word "true" at the side of the questionnaire. If it does not describe how you think about the future, circle the word "false" at the side of the questionnaire.**

- 99 I look forward to the future with hope and enthusiasm. True/False
- 100 I might as well give up because I can't make things better for myself. True/False
- 101 When things are going badly, I am helped by knowing they can't stay that way forever. True/False
- 102 I can't imagine what my life would be like in 10 years. True/False
- 103 I have enough time to accomplish the things I most want to do. True/False
- 104 In the future I expect to succeed in what concerns me most. True/False
- 105 My future seems dark to me. True/False
- 106 I expect to get more of the good things in life than the average person. True/False

- 107 I just don't get the breaks and there's no reason to believe  
I will in future. True/False
- 108 My past experiences have prepared me well for my future. True/False
- 109 All I can see ahead of me is unpleasantness rather than pleasantness. True/False
- 110 I don't expect to get what I really want. True/False
- 111 When I look ahead to the future I expect I will be happier  
than I am now. True/False
- 112 Things just won't work out the way I want them to. True/False
- 113 I have great faith in the future. True/False
- 114 I never get what I want so it's foolish to want anything. True/False
- 115 It is unlikely that I will get any relationships satisfaction in the future. True/False
- 116 The future seems vague and uncertain to me. True/False
- 117 I can look forward to more good times than bad. True/False
- 118 There's no use in really trying to get something I want  
because I probably won't get it. True/False

**Thanks for taking the time to fill out this questionnaire. Please check you have answered all the questions you intended to, then place it in the attached envelope and post it as soon as possible.**

## **Appendix B**

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Mentor Relationship Questionnaire (Mentor)

**This questionnaire relates to your evaluation of the mentor relationship. Could you please answer the questions giving as much detail as you wish.**

1. What is your evaluation of the mentoring relationship?
2. How often did you meet with you protégé?
3. How committed did your protégé seem to the relationship?
4. Did you encourage two-way exchange of information and act as a sounding board for ideas?
5. Did you help to interpret and clarify the organisational culture, political structure and vision?
6. Did you give specific feedback and act as an independent third party to clarify thinking on items such as performance goals and developmental needs.
7. Did you provide information about career opportunities and suggest strategies?

8. Did you tell your protégé about other places to obtain information?
  
9. Did you expand you and your protégés understanding of the workings of the organisation?
  
10. Have you got more confidence and a better understanding of your contributions through this relationship? What about your protégé - did they gain more confidence?
  
11. Do you have more insight and ways to solve problems as a result of this relationship?
  
12. What other roles did you fulfil in this mentor relationship?

**Thanks for taking the time to fill out this questionnaire. Please check you have answered all the questions you intended to, then place it in the attached envelope and post it as soon as possible.**

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## **Appendix C**

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Mentor Relationship Questionnaire (Protégé)

**This questionnaire relates to your evaluation of the mentor relationship. Could you please answer the questions giving as much detail as you wish.**

1. What is your evaluation of the mentoring relationship?
2. How often did you meet with your mentor?
3. How committed did your mentor seem to the relationship?
4. Did your mentor encourage two-way exchange of information and act as a sounding board for ideas?
5. Did your mentor help to interpret and clarify the organisational culture, political structure and vision?
6. Did your mentor give specific feedback and act as an independent third party to clarify thinking on items such as performance goals and developmental needs.

7. Did your mentor provide information about career opportunities and suggest strategies?
  
8. Did your mentor tell you about other places to obtain information?
  
9. Did your mentor expand your understanding of the workings of the organisation?
  
10. Have you got more confidence and a better understanding of your contributions through this relationship?
  
11. Do you have more insight and ways to solve problems as a result of this relationship?

**Thanks for taking the time to fill out this questionnaire. Please check you have answered all the questions you intended to, then place it in the attached envelope and post it as soon as possible.**

# Appendix D

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Demographic Questionnaire

**Firstly I would like some general information about you.**

Circle the answer which is best for you or give some details in the spaces provided.

Are you the mentor or the protégé? \_\_\_\_\_

How old are you? \_\_\_\_\_

What is your sex?                      Male [  ]      Female [  ]

How long have you lived in Auckland? \_\_\_\_\_

What is your present marital status?

- Never married [  ]
- Married/defacto [  ]
- Separated/divorced [  ]
- Widowed [  ]

What ethnic group do you belong to?

- New Zealander of Maori descent [  ]
- New Zealander of European descent [  ]
- New Zealander of Pacific Island descent [  ]
- Other please specify [  ]

\_\_\_\_\_

What is your highest educational qualification?

- No school qualification [  ]
- School certificate passes [  ]
- University entrance or above [  ]
- Trade Certificate or professional certificate or diploma [  ]
- University degree, diploma or certificate [  ]

Are you sworn or non-sworn? \_\_\_\_\_

How many years service do you have? \_\_\_\_\_

How many years service as a Police Officer? \_\_\_\_\_

Are you in frontline duties now? Yes/No

Could you give me a brief breakdown of your experience? (E.g. 10 years sworn 5 years non-sworn, 2 years traffic safety).

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Any comments you would like to make.

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# Appendix E

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Information Sheet (Protégé Group – 2 sets)



## **Implementation and evaluation of the Field Support Officer programme into the New Zealand Police.**

### **INFORMATION SHEET (Protégé group):**

Yvonne Carleton wishes to invite you to participate in a Mentoring programme being introduced into the New Zealand Police. It is to be called the Field Support Officer Programme. This project forms part of Yvonne's PhD degree. This project is under the supervision of Dr. Bernhard Frey and Dr. Hillary Bennett both lecturers in Psychology at the Albany campus of Massey University.

Yvonne Carleton is a Police Officer who is presently on study leave, granted by the Police to trial this Field Support Officer programme.

The purpose of the study is to investigate the implementation and quality of the Field Support Officer Programme being introduced into the New Zealand Police. This programme is designed to supplement psychosocial support already available to Probationary Constables joining the Police. This programme involves Probationary Constables being assigned a mentor for the first six months of their careers.

The study will consist of interviews, questionnaires and use of assessment instruments. Interviews may be taped with your permission (tapes will be transcribed by the researcher). Participation in this study is voluntary, you have the right to decline this opportunity, and you have the right to refuse to take part in any aspect of the study. You also have the right to:

- decline to participate.
- refuse to answer any particular questions.
- to withdraw from the study at any time.
- to ask questions about the study at any time during participation.
- provide information on the understanding that your name will not be used unless you give permission to the researcher.
- to be given access to a summary of the findings of the study when it is concluded.

The initial training is a two hour session which is part of the - successful mentoring package. Prior to this some of you will be sent a short questionnaire which should take about 20 minutes to fill out. The expected time you will spend with the field support officer will be about 10 hours. If you agree to participate you have the right to withdraw at any stage.

As this study is what is commonly known as an experimental design there will be a need for some participants to become part of control groups. These participants will form part of the study by being comparison groups who do not have the initial training and other interviews, however at the end of six months they will be offered the training and a Field Support Officer for the same period as those in the experimental groups. Assignment to the groups will be random.

Non participation in this study will not adversely affect your career.

If the research methods or content of the information asked for causes you distress in any way, support systems are available to you. You can contact the researcher, or your own support network. There is help within the Police - the Police Chaplains and Welfare section as well as counselling available through the Welfare fund. It is not envisaged there will be any adverse effects on you as a result of this study, however it is important to point out these relevant agencies.

As this is a programme involving training anonymity can not be guaranteed however all responses to questionnaires will be **confidential**. To aid anonymity in relation to written responses, questionnaires will be numbered, with a separate 'name to number' list kept by Dr. Bernhard Frey. Only Dr. Frey will be able to match name to number. No responses will be released to the Police (except to the researcher for the purposes of analysis only). The only information Police will have access to will be in the form of journal articles or thesis documentation.

All information will be treated as **confidential**. No names or information which might identify you or your work will be used in any report written. You may at any time during the study have access to the information relating to you, and you may discuss any matters arising from the study with the researcher or her supervisors. Should you have any queries about the content or nature of the questionnaire, or if any aspect of the research distresses or concerns you in any way please contact either the researcher directly on (09) 846 1231 or Dr. Frey on (09) 443 9363 or e-mail : [b.f.frey@massey.ac.nz](mailto:b.f.frey@massey.ac.nz).

All data collected for the purposes of this study will be kept in a secure place. Any tapes/questionnaires will be destroyed at the end of this study.

The information collected in this research will be analysed and written as the research study for completion of the researcher's PhD thesis.

Please read and complete the attached consent form when you have decided to participate. Keep this information sheet for future reference.

Yvonne Carleton  
Researcher



## **Implementation and evaluation of the Field Support Officer programme into the New Zealand Police.**

### **INFORMATION SHEET (Protégé group):**

Yvonne Carleton wishes to invite you to participate in a Mentoring programme being introduced into the New Zealand Police. It is to be called the Field Support Officer Programme. This project forms part of Yvonne's PhD degree. This project is under the supervision of Dr. Paul Merrick Associate Professor of Psychology at the Albany campus of Massey University.

Yvonne Carleton is a Police Officer who is presently on study leave, granted by the Police to trial this Field Support Officer programme.

The purpose of the study is to investigate the implementation and quality of the Field Support Officer Programme being introduced into the New Zealand Police. This programme is designed to supplement psychosocial support already available to Probationary Constables joining the Police. This programme involves Probationary Constables being assigned a mentor for the first six months of their careers.

The study will consist of interviews, questionnaires and use of assessment instruments. Interviews may be taped with your permission (tapes will be transcribed by the researcher). Participation in this study is voluntary, you have the right to decline this opportunity, and you have the right to refuse to take part in any aspect of the study. You also have the right to:

- decline to participate.
- refuse to answer any particular questions.
- to withdraw from the study at any time.
- to ask questions about the study at any time during participation.
- provide information on the understanding that your name will not be used unless you give permission to the researcher.
- to be given access to a summary of the findings of the study when it is concluded.

The initial training is a two hour session which is part of the - successful mentoring package. Prior to this some of you will be sent a short questionnaire which should take about 20 minutes to fill out. The expected time you will spend with the field support officer will be about 10 hours. If you agree to participate you have the right to withdraw at any stage.

As this study is what is commonly known as an experimental design there will be a need for some participants to become part of control groups. These participants will form part of the study by being comparison groups who do not have the initial training and other interviews, however at the end of six months they will be offered the training and a Field Support Officer for the same period as those in the experimental groups. Assignment to the groups will be random.

Non participation in this study will not adversely affect your career.

If the research methods or content of the information asked for causes you distress in any way, support systems are available to you. You can contact the researcher, or your own support network. There is help within the Police - the Police Chaplains and Welfare section as well as counselling available through the Welfare fund. It is not envisaged there will be any adverse effects on you as a result of this study, however it is important to point out these relevant agencies.

As this is a programme involving training anonymity can not be guaranteed however all responses to questionnaires will be **confidential**. To aid anonymity in relation to written responses, questionnaires will be numbered, with a separate 'name to number' list kept by Dr. Paul Merrick. Only Dr. Merrick will be able to match name to number. No responses will be released to the Police (except to the researcher for the purposes of analysis only). The only information Police will have access to will be in the form of journal articles or thesis documentation.

All information will be treated as **confidential**. No names or information which might identify you or your work will be used in any report written. You may at any time during the study have access to the information relating to you, and you may discuss any matters arising from the study with the researcher or her supervisors. Should you have any queries about the content or nature of the questionnaire, or if any aspect of the research distresses or concerns you in any way please contact either the researcher directly on (09) 846 1231 or Dr. Merrick on (09) 443 9363 or e-mail : P.L.Merrick@massey.ac.nz.

All data collected for the purposes of this study will be kept in a secure place. Any tapes/questionnaires will be destroyed at the end of this study.

The information collected in this research will be analysed and written as the research study for completion of the researcher's PhD thesis.

Please read and complete the attached consent form when you have decided to participate. Keep this information sheet for future reference.

Yvonne Carleton  
Researcher

# Appendix F

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Consent Form (Protégé Group)



**Implementation and evaluation of the Field Support Officer programme into the  
New Zealand Police.**

**CONSENT FORM (Protégé group):**

I have read the Information sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time. I understand that I may contact the researcher or the supervisor at any time during the study to discuss any concerns that may arise as a result of this study.

I understand that as this is an experimental design participants will receive training at different times and participate in the study at different times (answering questionnaires, interviews and assessment instruments). I also understand that this will not lead to any disadvantage to any participant or non-participant.

I also understand that I have the right to withdraw from the study at any time and to decline to answer any particular questions in the study. I agree to provide information to the researcher on the understanding that it is completely confidential, and I will not be identifiable in any information reported.

I agree to provide information to the researcher based on the understanding that my name and personal details will not be used without my permission. I understand that the information that I provide will be used for this project and publications arising from it.

I understand that filling in any questionnaire implies consent and I have the right to decline to answer any question in any questionnaire.

I agree to participate in this study under the conditions set out in the information sheet.

Signed: \_\_\_\_\_  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_

I agree/do not agree to this interview being audio taped.

I also understand that I have the right to ask for the audio tape to be turned off at any time during the interview.

Signed: \_\_\_\_\_  
Name: \_\_\_\_\_  
Date: \_\_\_\_\_

# **Appendix G**

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Information Sheet (Mentor Group) – 2 sets



## **Implementation and evaluation of the Field Support Officer programme into the New Zealand Police.**

### **INFORMATION SHEET (Mentor Group):**

Yvonne Carleton wishes to invite you to participate in a Mentoring programme being introduced into the New Zealand Police. It is to be called the Field Support Officer Programme. This project forms part of Yvonne's PhD degree. This project is under the supervision of Dr. Bernhard Frey and Dr. Hillary Bennett both lecturers in Psychology at the Albany campus of Massey University.

Yvonne Carleton is a Police Officer who is presently on study leave, granted by the Police, to trial this Field Support Officer programme.

The purpose of the study is to investigate the implementation and quality of the Field Support Officer Programme being introduced into the New Zealand Police. This programme is designed to supplement psychosocial support already available to Probationary Constables joining the Police. This programme involves mentoring Probationary Constables for the first six months of their careers.

The study will consist of interviews, questionnaires and use of assessment instruments. Interviews may be taped only with your permission (tapes will be transcribed by the researcher). Participation in this study is voluntary, you have the right to decline this opportunity, and you have the right to refuse to take part in any aspect of the study. You also have the right to:

- decline to participate.
- refuse to answer any particular questions.
- to withdraw from the study at any time.
- to ask questions about the study at any time during participation.
- provide information on the understanding that your name will not be used unless you give permission to the researcher.
- to be given access to a summary of the findings of the study when it is concluded.

The initial training is a one day package - successful mentoring, prior to this you will be sent a short questionnaire which should take about 20 minutes to fill out. The expected time contribution over the next six months as a Field Support Officer will be about 10 hours.

Non participation in this study will not adversely affect your career.

If the research methods or content of the information asked for causes you distress in any way, support systems are available to you. You can contact the researcher, or your own support network. There is help within the Police - the Police Chaplains and Welfare section as well as counselling available through the Welfare fund. It is not envisaged there will be any adverse effects on you as a result of this study, however it is important to point out these relevant agencies.

As this is a programme involving training anonymity can not be guaranteed however all responses to questionnaires will be **confidential**. To aid anonymity in relation to written responses, questionnaires will be numbered, with a separate 'name to number' list kept by Dr. Bernhard Frey. Only Dr. Frey will be able to match name to number. No responses will be released to the Police (except to the researcher for the purposes of analysis only). The only information Police will have access to will be in the form of journal articles or thesis documentation.

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The information collected in this research will be analysed and written as the research study for completion of the researcher's PhD thesis.

Please read and complete the attached consent form when you have decided to participate. Keep this information sheet for future reference.

Yvonne Carleton  
Researcher



## **Implementation and evaluation of the Field Support Officer programme into the New Zealand Police.**

### **INFORMATION SHEET (Mentor Group):**

Yvonne Carleton wishes to invite you to participate in a Mentoring programme being introduced into the New Zealand Police. It is to be called the Field Support Officer Programme. This project forms part of Yvonne's PhD degree. This project is under the supervision of Dr. Paul Merrick Associate Professor of Psychology at the Albany campus of Massey University.

Yvonne Carleton is a Police Officer who is presently on study leave, granted by the Police, to trial this Field Support Officer programme.

The purpose of the study is to investigate the implementation and quality of the Field Support Officer Programme being introduced into the New Zealand Police. This programme is designed to supplement psychosocial support already available to Probationary Constables joining the Police. This programme involves mentoring Probationary Constables for the first six months of their careers.

The study will consist of interviews, questionnaires and use of assessment instruments. Interviews may be taped only with your permission (tapes will be transcribed by the researcher). Participation in this study is voluntary, you have the right to decline this opportunity, and you have the right to refuse to take part in any aspect of the study. You also have the right to:

- decline to participate.
- refuse to answer any particular questions.
- to withdraw from the study at any time.
- to ask questions about the study at any time during participation.
- provide information on the understanding that your name will not be used unless you give permission to the researcher.
- to be given access to a summary of the findings of the study when it is concluded.

The initial training is a one day package - successful mentoring, prior to this you will be sent a short questionnaire which should take about 20 minutes to fill out. The expected time contribution over the next six months as a Field Support Officer will be about 10 hours.

Non participation in this study will not adversely affect your career.

If the research methods or content of the information asked for causes you distress in any way, support systems are available to you. You can contact the researcher, or your own support network. There is help within the Police - the Police Chaplains and Welfare section as well as counselling available through the Welfare fund. It is not envisaged there will be any adverse effects on you as a result of this study, however it is important to point out these relevant agencies.

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All data collected for the purposes of this study will be kept in a secure place. Any tapes/questionnaires will be destroyed at the end of this study.

The information collected in this research will be analysed and written as the research study for completion of the researcher's PhD thesis.

Please read and complete the attached consent form when you have decided to participate. Keep this information sheet for future reference.

Yvonne Carleton  
Researcher

# Appendix H

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Consent Form (Mentor Group)



**Implementation and evaluation of the Field Support Officer programme into the  
New Zealand Police.**

**CONSENT FORM (Mentor):**

I have read the Information sheet for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time. I understand that I may contact the researcher or the supervisor at any time during the study to discuss any concerns that may arise as a result of this study.

I also understand that I have the right to withdraw from the study at any time and to decline to answer any particular questions in the study.

I agree to provide information to the researcher based on the understanding that my name and personal details will not be used.

I understand that the information that I provide will be used for this project and publications arising from it.

I understand that filling in any questionnaire implies consent and I have the right to decline to answer any question in any questionnaire.

I agree to participate in this study under the conditions set out in the information sheet.

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

I agree/do not agree to any interview being audio taped.

I also understand that I have the right to ask for the audio tape to be turned off at any time during the interview.

Signed: \_\_\_\_\_

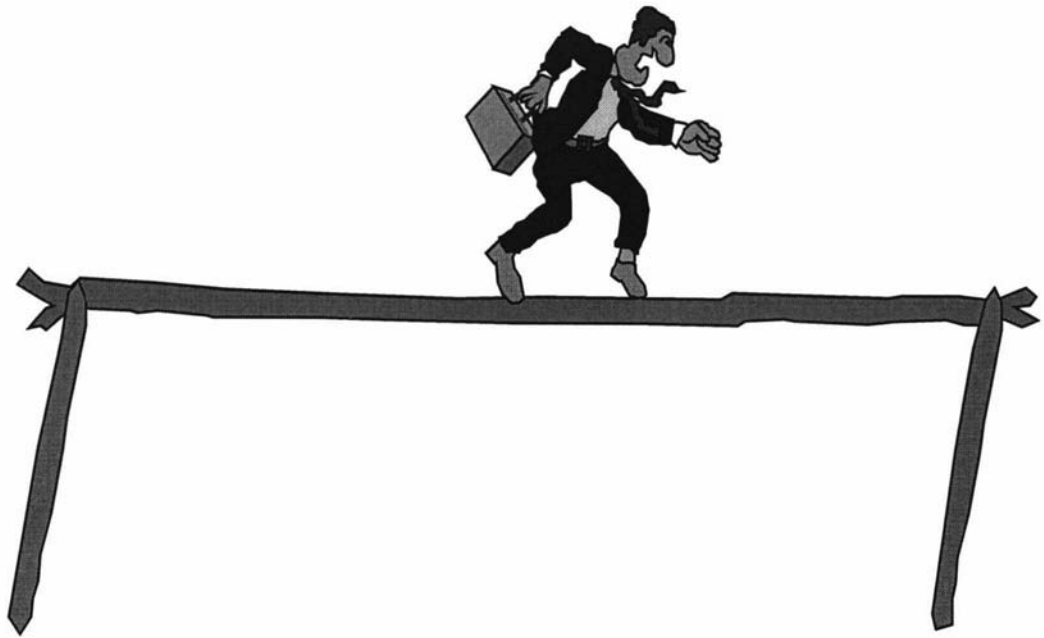
Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Appendix I

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Training Package – Booklet



**SUCCESSFUL  
MENTORING**

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

**Yvonne 1998!!!!**

The aim of this programme is to introduce a mentoring programme into the NZ Police that will provide additional support to probationary Constables in their induction into the Police.

***This programme is to supplement present police support not replace it.***

# History

The word *mentor* has recently gained currency in the professional world, where it is thought to be a good idea to have a mentor, a wise and trusted counsellor, guiding one's career, preferably in the upper reaches of the organisation.

## THE STORY IN BRIEF - THE GREEK LINK

King Odysseus entrusted his home and family to the care of Mentor when he left Ithaca to fight in the Trojan wars. During the king's absence, his son, Telemachus, observes many suitors coming to the family home to woo his mother. These characters are uncouth and Telemachus learns their debauched ways. The suitors have selfish designs on the queen and the kingdom. Athena, goddess of civil administration, war and, very significantly, wisdom, is unhappy about this situation as she wishes to keep the kingdom intact. She sees Telemachus as the only person who can take any action but he is very clearly becoming out of control himself. She decides to intervene in order to rectify the deteriorating situation and to help develop leadership and political qualities in Telemachus.

To do this, she visits Telemachus in the guise of both Mentos and Mentor. These characters are known to both Odysseus and Telemachus as trusted men. Mentos has the status of guest (in Greek mythology a very honoured position) in Odysseus' household and Mentor, as already mentioned, has the position of elder statesman in Ithaca. First, as Mentos, Athena tests Telemachus' potential for development by encouraging him to rid the court of the undesirable suitors. The young man proves up to the task. Second, as Mentor, she sets the lad some challenges in order to develop his latent talents. The main challenge for Telemachus is to lead a voyage to search for news of his father. (Athena knows that Odysseus is alive and well but nobody else does.) Athena intervenes on the young man's behalf on several occasions and in one situation she puts him into a deep sleep and then takes his form in order to persuade some seamen to join the voyage of discovery. At one point in the voyage, Mentor (Athena) feels that he/she has done enough and so leaves Telemachus in the hands of King Nestor (Nestor is favoured by the Gods as a mortal king) who, with his son, helps Telemachus further to develop his leadership potential. The end result is that Telemachus becomes a vital aide to his father on his return and he develops the abilities necessary to succeed his father as king. Athena's aim which was to "earn him repute among men" is achieved.

## THE KEY ELEMENTS OF THE STORY

The key elements of the story give us some insight into the nature of the mentor relationship.

- An individual may have several mentors in different development periods. (*Mentes, Mentor, Nestor and his son.*)
- Each mentor may bring out different aspects of the protégé's character. (*Identifying potential, setting challenges, assisting in their achievement.*)
- A mentor relationship is challenging and developmental. (*Ridding the court of the suitors, the voyage and its outcomes.*)
- The mentor often has greater or different experience and knowledge. (*Athena, being a goddess, knows the outcome of the voyage to be fruitless in terms of its aim for information about Odysseus. She also knows that it will develop Telemachus.*)
- Mentor relationships are often short.
- Mentors need to invest time in their protégés and know when to withdraw. (*Mentor leaves Telemachus with Nestor.*)
- Mentors may intervene on the protégé's behalf. (*The disguise.*)
- Mentors are often but not always older than protégés. (*Mentes, Mentor, Nestor but Nestor's son was a contemporary.*)
- Trust is a key element. (*Mentes and Mentor are not immediately trusted by Telemachus they develop trust.*)
- A mentor has clear influence over the protégé's activities but does not control them. (*Challenges are set and agreed but Telemachus carries them out.*)
- A mentor is not limited by gender (*Athena chose to visit Telemachus as a man.*)

Odysseus, a Greek leader in the Trojan War, faced many challenges in this trial of human conflict. To succeed, he tapped the help of his personal counsellor and friend named Mentor; thus began the title and the role of mentor.

## **Mentoring definition:**

**men·tor** (mèn'tôr', -ter) *noun*

1. A wise and trusted counsellor or teacher.

2. **Mentor.** *Greek Mythology.* Odysseus's trusted counsellor, under whose disguise Athena became the guardian and teacher of Telemachus.

*verb*

**men·tored, men·tor·ing, men·tors**

*Informal. verb, intransitive*

To serve as a trusted counsellor or teacher, especially in occupational settings.

*verb, transitive*

To serve as a trusted counsellor or teacher to (another person).

[French *Mentor*, Mentor, from Latin *Mentor*, from Greek.]

**pro·te·ge** (preo'te-zha',) *noun*

One whose welfare, training, or career is promoted by an influential person.

(French, from past participle of *protégér*, to protect, from old French, from latin *protégère*.)

MENTORS are "people who through their actions and work, help others to achieve their potential."

Mentoring a guide to the basics Shea, G.(1992). Crisp publications: California.

Mentors are people who have a special or memorable helpful effect on us and our lives. Mentoring is an investment in others.

The empowering mentor - sound mentoring respects the uniqueness of the protégé and strives to enhance the special strengths of that person. Effective mentors tend to focus on what the protégé did in response to the mentor's help rather than how they did it. Some of the best mentors are people who assume they as well as their protégés are in a lifelong process of self development.

# Field Support Officers Programme

**Mentoring** can be thought of as:

a relationship between equals in which one or more of those involved is enabled to:  
increase awareness, identify alternatives and initiate action to develop themselves.

This will allow us to draw our mentors from a much wider pool than just managers.

## **TRENDS: THE ORGANISATIONAL PERSPECTIVE**

### **Development or transformation?**

*a paradigm shift is a move away from the certainty of the right answers to a process of transformation and a world of the unknown.*

This programme recognises the Police as a learning organisation. It is based on the implicit assumptions that we are *all* capable of learning - and that we need to share that learning with others in the organisation.

This leads to empowerment and personal growth. Traditional styles of *anything* (including mentoring) will, in future, have limited usefulness if we want our organisations to be filled with employees who use initiative, make decisions, take responsibility for quality and interact well with colleagues and customers.

### **Today's trends are coming from the individual perspective.**

Trends which can be linked to an increasing concern for quality of life include such aspects as flexible working, job sharing, homeworking, and telecommuting. In the Police this is reflected in FEO policy and other recent Policy changes effecting the individual.

Today's employment climate recognises that careers are increasingly being seen as sideways movement patterns, so that we continue developing without necessarily having to be a 'leader'.

## WHAT HAPPENS NOW?

### What gets called 'mentoring'?

- Showing people the ropes - and helping them to climb them
- Passing on knowledge and/or skills, formally or informally
- Looking after people
- Acting as a sounding board
- Helping people to put learning into practice
- Being a role model
- Being a guide
- Talking to people about their careers
- Counselling
- Coaching

Many of these responses are based on the traditional model of mentoring, with one person passing on their greater wisdom and experience to another. However, others confuse mentoring with other methods, such as coaching or counselling.

### The Mentor relationship

Relationship is used to make the point that people engaged in this approach make a real connection with each other. Discussion of long-term growth requires a high level of trust in both directions. The protégé needs to feel able to share their concerns and discuss their weakness; the mentor needs to be able to do the same when this might help the protégé.

Finally, our relationship must be strong enough to survive challenges. There will be times when a mentor has to confront a protégé.

The mentor will have to:

- set aside their own view of the world
- use cooperative enquiry to help the protégé explore *their* world
- be fully with the protégé during this process
- be willing to review personal behaviour as a source of insight for the protégé
- be prepared to experiment with new ways of relating so that the protégé can see what happens.

The basic assumptions of this field support officer programme are that:

### **It is between Equals**

A factor is that junior people with the right skills can make excellent mentors in their own right. We lose this valuable source of talent if we restrict ourselves to senior/junior pairings. The keys to successful development nowadays will instead be the ways in which we manage to act together and the skills we are able to use.

### **People are OK**

'I'm OK, You're OK'.

There is no justification for restricting the role of mentor to the chosen few! In the same way, mentors are effective because they care about people and not because of their level within the hierarchy.

**To be an effective relationship a belief in the following may help:**

- People want closeness
- People can change
- People want to grow
- We create our own meaning
- We can make decisions
- Our behaviour is purposeful

### **Mentoring, coaching and counselling**

Mentoring involves the qualities of coaching and counselling as well as many other skills.

Mentoring, coaching and counselling all utilise some core skills, such as establishing rapport, listening, questioning, summarising and giving feedback. They may use these skills somewhat differently, but the basic actions are similar and the skills are potentially transferable.

### **Suitable mentors**

Mentors can be found at any level of an organisation's hierarchy, or even outside it, there is still a danger that people will volunteer for the wrong reasons.

Once a mentor, they may not realise that they are pushing their own opinions onto the protégé, or that they are living a new career vicariously through the protégé, or that they have sided with the protégé in opposition to the organisation. Conversely, there may be a shortage of suitable volunteers because the concept is new, because people lack self-confidence in their ability to be of help to others, because of fears of seeming to get 'above their station' in the eyes of managers and colleagues.

## **10 myths**

- 1. Mentors exist only for career development.**
- 2. You need only one mentor.**
- 3. Mentorhood is a one-way street.**
- 4. A mentor has to be older than the protégé.**
- 5. A mentor has to be the same gender and race as the protégé.**
- 6. Mentor relationships just happen.**
- 7. High-profile people make the best mentors.**
- 8. Once a mentor, always a mentor.**
- 9. Mentorhood is a complicated process.**
- 10. Mentor-protégé expectations are the same for everyone.**

## **Role of mentor**

The mentor role is:

- to listen and empathise
- to treat all information given as confidential
- to offer advice, ideas and suggestions
- offer specialised information where appropriate
- act as a sounding board
- refer to specific agencies when appropriate
- to share the benefits of their experience
- respect confidentiality

The mentor role is not:

- to be a consultant
- to be responsible for ultimate success
- to do all the work
- dominate, preach, put down or tell people what to do
- judge people or try to change them
- gossip about what is said in the relationship



Great goals are never

achieved until you

decide to dare to fail!

**Key factors in being a successful mentor**

Remember failure is a necessary step to success.

High achievers have more failures because they try more often

Failures don't try and therefore don't fail - they do not succeed either!!!!

Successful performance requires persistence through failure.

Persistence requires a healthy attitude to failure. A way of thinking about failure is: it is a necessary item in the toolbox of success; it makes success three dimensional; it is an opponent who tests, then forces you to learn and improve; a barrier that offers directions for a diversion. FAILURE is inevitable. It is also a balance between persistence (pig headedness) and not doing enough to succeed (giving up too early). The test is knowing when

to persist on the path you are on and when to look for an alternative solution.

Mentors and protégés through collaboration can figure out the likelihood of success or paths to try - even then some paths will be dead ends. Barriers are the manifestation of a skill yet to be learnt.

Motivation is another important factor in success.

Some people are mainly internally motivated (I did a good job there I will do that again); others externally ("You did a good job there" - pat on the back - person thinks I will do that again).

Motivation is as unique as your fingerprints however there are factors that influence your motivation. Motivations can be voluntary (personal choice of what motivates you), external or environmental (light, heat, fair pay, good work environment), involuntary (breathing, food, shelter, warmth and survival), and internal or self-determined (ear-mark of the entrepreneur). When mentoring think about your own motivation and that of the protégé. Do not guess your protégé's motivators - ask to confirm your own thoughts.

Motivators are important to success and therefore an important part of the mentor relationship.

The main objective of mentoring is to improve performance through empowerment. In this mentor relationship the aim is to provide the protégé with a person they can trust, who gives sound advice, who works with the protégé to solve problems, who helps the protégé stay up to date with units by encouragement and sharing their achievements; who advises the protégé where to find information as well as providing the knowledge from experience. By providing this support the protégé will perform better and become accustomed to the Police culture quicker. The mentor does not have to know everything. The protégé does not have to know everything either it is a joint journey of discovery. The mentor learns leadership skills by closely working with an individual to achieve success and is reminded of the finer points of the law which will be fresh in the protégé's head and also learn what the college is teaching these days!!!! The protégé shares their experiences, thoughts, achievements and has a role model to follow.

Training is an important facet of mentoring - you are playing a small role in the overall training of the protégé however yours is an important role. It is interesting to look at the implications of this “give someone a fish and you feed them for a day - teach them to fish and you feed them for life” which is OK if you like fish I suppose. In the training of Police officers we are trying to give them tools for life as well as tools for policing.

MacLennan, N. (1996). *Coaching and Mentoring*. Gower: Vermont.

## Helping styles:

**Telling** - the mentor endeavours to help by solving the problem for the protégé excluding the protégé. This is common with technical information but may not be so helpful if the protégé is trying to learn and is perhaps stuck at a small obstacle that needs removal.

**Advising** - is another method which is problem solving focused but includes the protégé in the problem solving. The adviser develops options leaving the choice to the protégé. A good process however this may introduce options which are outside the knowledge or expertise of the protégé thus not developing the protégé's own problem solving techniques.

**Manipulating** - This mentor gives the illusion of protégé focus but excludes the protégé from the problem-solving process. The manipulator uses the protégé to satisfy their own needs and wants the protégé in a dependant role.

**Counselling** - A style of helping that is protégé focused and involves the protégé solving the problem. This style is significantly different from the other three. It is a joint solving process which uses the tools available to the protégé including a few learnt from the mentor as part of the process.

An awareness of these styles will help you become a better leader, mentor and protégé.

## Hindering Styles:

**Criticism** - is evaluative and judgemental no matter how we sugarcoat it. Alternative: Mentors often give their best when they help their protégés to break out of repetitive negative patterns of behaviour. When a person makes the same mistake repeatedly the solution is to not give them the same answer over again and again.

**Advise:** When we give advice we assume we have superior knowledge, insight or wisdom related to the problem. When dealing with a protégés personal problem they have all the knowledge!! So listen carefully, feedback showing understanding and empathy, provide ideas/information if asked so this can be incorporated into the solution of the protégé.

**Rescuing:** or attempting to take over the problem is not likely to be helpful in the long run. Temporary help in a crisis may be appropriate, but when there is a recurring pattern of such rescuing the mentor becomes the protégés problem.

## **6 principles**

### **Helping a person to shift their mental context**

by:

- Growth influences - Knowing when someone (protégé) is ready to move on in their learning.
- Shifting context: - through imagination encouraging the protégé to imagine themselves as successful and then helping them achieve this.
- Envisaging Outcomes: - Before the plan comes the outcome !!! Similar to shifting context in that by picturing themselves in a role they become that performer.  
Focus on the *what* not the *how*.

### **Listening when the protégé has a problem**

Not only by listening to what the protégé has to say but also querying in a helpful way to clarify what is being said. Listen for feelings and motivation

### **Identifying protégé feelings and verifying them (feedback).**

Its OK to be apprehensive, excited and cautious - this is all about reflective and supportive feedback, remember everyone experiences life differently.

### **Effectively confronting negative intentions or behaviour**

Confront attitude, behaviour or plans in an effective way. Use 'I' language. Be neutral when describing the perception, state the possible negative consequences, and your own feelings or emotions associated with the plan described to you.

### **Providing appropriate information when needed**

Information provided should be explored remember you are helping someone learn the systems not just the answers.

### **Encouraging exploration of options**

When confronted with a decision there are always many answers. When asked for advice explore the other persons perceptions, their expectations of your input and also their plans. Then together look for alternatives.

Advice is not just giving someone your opinion it is exploring a joint view of the same situation.

# LEARNING STYLES

## The Activist

Learns best:

- when it is appropriate to 'have a go';
- when involved with other people'
- when there are a lot of new experiences;
- when in the limelight, leading discussions etc.

Learns least:

- when learning is passive e.g. lectures;
- when asked to stand back;
- when working alone;
- when repeating work, e.g. practising;
- under precise instructions, lack of flexibility.

## The Theorist

Learns best:

- when there is time to methodically explore ideas / events;
- when intellectually stretched;
- when in structured situations with a clear purpose;
- when analysis is required.

Learns least:

- in situations requiring emotions, feeling
- when involved in unstructured activities
- when involved in something without a context;
- when the subject matter appears 'shallow'.

## The Reflector

Learns best:

- when allowed to watch / think / chew over;
- when allowed to think before acting;
- when able to reach a decision in their own time.

Learns least:

- when forced into the limelight;
- when worried by time pressures;
- when forced to do a superficial job;
- when given insufficient data;
- when in a situation requiring action; without planning.

## The Pragmatist

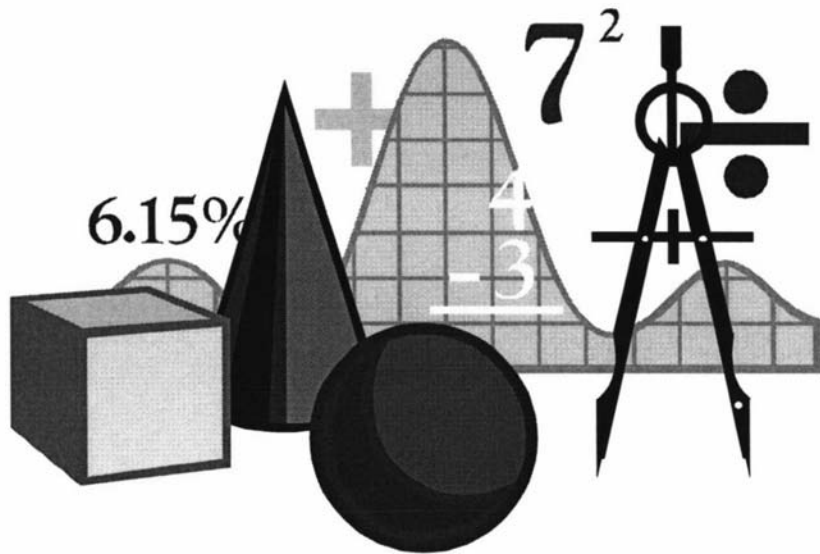
Learns best:

- when the link is made between the topic and the actual job;
- when there is a chance to try out technique;
- when the topic deals with real problems.

Learns least:

- when topic is not related to an immediate need;
- when there are no clear guidelines;
- when they can't see sufficient reward from the activity

How are problems solved?



By removing whatever it is that has caused, or will cause, a gap between the expected (or desired) condition and the actual condition.

## Listening

Many people confuse listening and hearing. Hearing is the physical act in which we take in sounds. Listening is an emotional and intellectual act in which we process the sounds we take in and respond to them. Effective listening has two main parts:

- 1 An understanding of what is being said
- 2 An appropriate response to what is being said.

Eight effective listening techniques:

1. Eliminate external distractions
2. Eliminate personal distractions
3. Do not respond only to what the person is saying. Respond to the total communication: content, intent and nonverbal communication
4. Identify words or phrases which trigger your emotions and control your reactions. Think about why these have such a reaction on you.
5. Respond non-judgementally
6. Do not go into communication with your mind already made up
7. Do not rely on others to interpret what is happening in a situation
8. If you realise you are not listening, physically move forward.

Active listening is an extension of listening. It is listening which demonstrates empathy for the other person. It sends the message you care about the other person. It does not mean however that you agree with them.

Three principles to Nonjudgemental listening.

1. Respond to the behaviour or idea, or situation, not the person themselves. Ideas and behaviour are usually neutral and negotiable topics. Personalities are not. Use "I like you, but I don't like you leaving your clothes in the hallway".
2. Respond in the present not the past. Neither you nor the other person can change the past. You can only deal with the present and control the future. No one "always" behaves in a particular way. "What can you do to stop that happening again in the future" rather than "You are always doing that".
3. Respond by describing not evaluating. Describe what you hear being said not what you judge is being said. "I hear you saying you are finding it hard to come to grips with what happened this morning".

Reflective listening helps check out whether you heard something the way it was intended. "When you said..., did you mean...?"

Avoid being hooked into an argument or confrontation. One of the common behaviours seen after a person has been exposed to a stressful incident is a tendency to become angry or annoyed and those trying to help receive the brunt of this. Use pauses and think what the real issue is for the person. Suggest a coffee or a walk. Remember who the problem belongs to and that the person will eventually take responsibility for their behaviour. Keep calm and do not take the person's anger personally.

## **REMINDER PAGE . . .**

### **Coaching Facilitation skills**

#### **Conflict prevention:**

How should you handle conflict when and if it does occur?

1. Stay cool
2. Seek understanding of the other's point of view
3. Check you have achieved that understanding
4. Demonstrate that you do understand
5. Ask how you can help the other party
6. Ask the other party if they wish to hear your point of view
7. Know exactly what you need to resolve the conflict from your point of view
8. Be flexible in achieving it
9. Persuade and allow yourself to be persuaded regarding the ultimate resolution
10. Have cooling off period before final agreement, to consider all ramifications
11. Where possible try to create a win-win situation for both parties.

Four barriers to mentoring: personal, organisational, environmental and process.

#### **Contract**

Points to be included in an agreement: clear expectations, availability, confidentiality, goals, time frame.

#### **Closing thoughts:**

Be curious about your protégés progress, ask questions about their units, how they are enjoying the job and how they are fitting in.

Listen intently. Be supportive.

Remain as objective as possible and try not to get emotionally involved when emotions are strained.

Engender hope - point out the persons strengths and weaknesses as well as their past problem solving strategies. Reassure person that they will be able to meet this challenge.

Be honest. Tell the person when his/her thoughts are self-defeating or when their perceptions are in error.

Give unconditional support. The message is " No matter how difficult the problem, I'll stick with you and assist you in getting the help you need".

Don't be afraid to set limits.

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# Appendix J

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Handouts to accompany training package

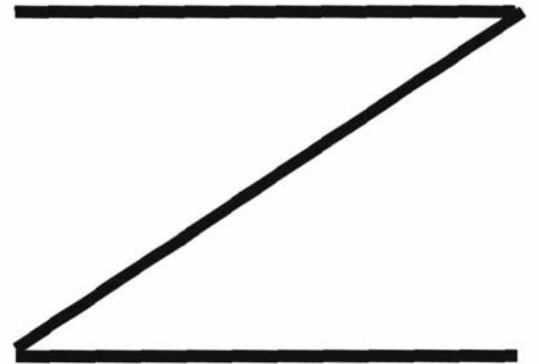
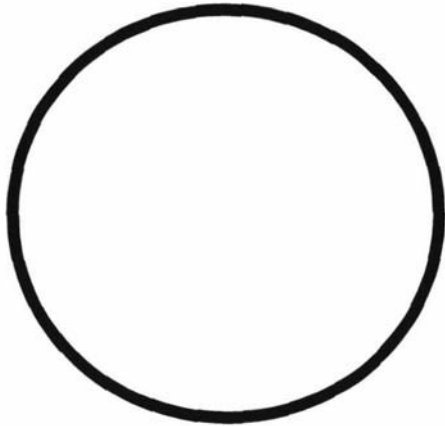
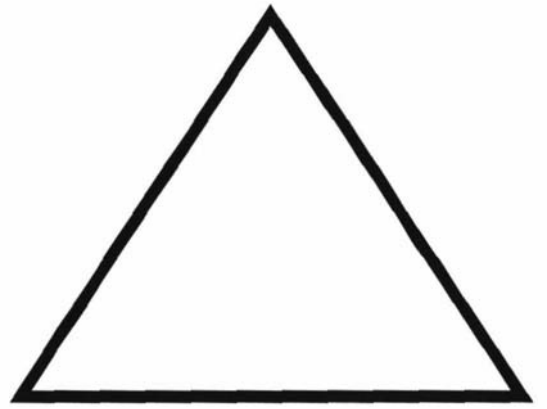
Pre - attendance questionnaire

### Mentoring starting the journey:

Please read the following questions, as the first exercise of the seminar will be to discuss these subjects.

When starting any new phase of our lives we ask ourselves many questions, some of these may be:

- What do I want from the mentoring process?
- What can I give to the mentoring process?
- What skills do I have, or need to have?



Rectangle = Intelligent,  
Strong decision maker

Triangle = Lateral thinkers  
**Prepared to look at all sides**

Z = Creative  
Strong imagination, Leaders

Circle = **Preoccupied with SEX and BOOZE**

## **EVERYBODY'S DOING IT**

### **Dare you try the new personality test?**

*How well do you really know yourself - or those you love, socialise or work with? Take the world's hottest personality test for some eye-opening revelations. By Tania Unsworth.*

It draws deeper psychological profiles than any other test of its kind, say enthusiasts. The Enneagram (pronounced "any-a-gram") is entering the mainstream, popping up everywhere from the pages of *Newsweek* magazine to universities. Vatican clergy have taken Enneagram seminars, and the CIA uses it to understand the behaviour of world leaders. Supporters of the Enneagram include psychologists and business executives, as well as ordinary people who say it's changed their lives. "Its main purpose is self-discovery," says Don Richard Riso, New York-based author and Enneagram developer.

The origins of the Enneagram are uncertain - it may have first surfaced as far back as the 10th century among the Sufis, an ancient Islamic sect. But, by the early '70s, it was being taught in California and was spreading rapidly across the US. There are now over 30 books about the Enneagram on sale in America alone and any number of workshops to attend.

### **HOW DOES IT WORK?**

The Enneagram divides people into nine types. Although you may identify with elements from each of the types, one should stand out as being closest to you. According to Enneagram teachers, our basic type is formed by childhood experiences as well as hereditary factors. Each Enneagram type describes a whole range of characteristics, from positive to negative. So, for example, if you are a reformer, you can be tolerant and highly principled at best, and self-righteous at worst.

Enneagram teachers stress that no single personality type is superior to the rest, and although everyone fits one basic type, this does not mean that all those who come under the one umbrella should have their entire character narrowed down to one set of

definitions. “Each individual is a unique manifestation of their type,” says pioneering Enneagram teacher, Helen Palmer. “Though this manifestation rests on a set of perceptions that is pretty consistent.”

## **WHAT IS IT USED FOR?**

The Enneagram’s primary use is as a tool for understanding ourselves and other people. “With it, you become able to see through the eyes of the people you relate to,” says Helen Palmer. “You learn the logic behind someone else’s actions and discover the integrity behind what may have seemed to you to be obstructive, or even hostile, actions.” Karen Webb, an Enneagram teacher in the UK, puts it more succinctly when she says, “You start to realise, ‘Oh, he’s not such a dick after all, he’s a number six!’”

The Enneagram is also being used in business for team-building: knowing how different people are likely to operate under stress or in relation to authority can be invaluable. If you have to deal with an aggressive type eight, for example, you’d want to know that your best strategy would be a display of firmness, rather than one of compromise, which the type eight may interpret as weakness.

But isn’t this just another way of pigeon-holing people? Enneagram practitioners all disagree. “The Enneagram doesn’t put people in boxes,” says Don Richard Riso. “It reveals the boxes that people are already in. If we can understand our personality, we can have a degree of freedom from it. We shouldn’t be ruled by our personality; we should have some authority over it.”

**To find out your personality type,** answer the following questions as honestly as you can. For each question, choose the statement that best describes you as you have been throughout most of your life. Circle the letter to which your answer corresponds. If you find that both statements describe you, think hard and decide which fits you better. And remember, there are no “right” answers.

- |    |  |   |
|----|--|---|
| 1  | I've been romantic and imaginative.  | E |
|    | I've been pragmatic and down-to-earth.   | B |
| 2  | I have tended to take on confrontations.   | G |
|    | I have tended to avoid confrontations.   | A |
| 3  | I have typically been diplomatic, charming and ambitious.                                    | C |
|    | I have typically been direct, formal and idealistic.   | D |
| 4  | I have tended to be focused and intense.   | H |
|    | I have tended to be spontaneous and fun-loving.  | I |
| 5  | I have been a hospitable person and have enjoyed welcoming new friends into my life.         | F |
|    | I have been a private person and have not mixed much with others.                            | E |
| 6  | Generally it's been easy to wind me up.  | B |
|    | Generally it's been difficult to wind me up.   | A |
| 7  | I've been more of a "street-smart" survivor.   | G |
|    | I've been more of a "high-minded" idealist.  | D |
| 8  | I have needed to show affection to people.   | F |
|    | I've preferred to maintain a certain distance with people.                                   | H |
| 9  | When presented with a new experience, I've usually asked myself if it would be useful to me. | C |
|    | When presented with a new experience, I've usually asked myself if it would be enjoyable.    | I |
| 10 | I have tended to focus too much on myself.   | E |
|    | I have tended to focus too much on others.   | A |
| 11 | Others have depended on my insight and knowledge.  | H |
|    | Others have depended on my strength and decisiveness.  | G |
| 12 | I have come across as being unsure of myself.  | B |
|    | I have come across as being too sure of myself.  | D |
| 13 | I have been more relationship-oriented than goal-oriented.                                   | F |
|    | I have been more goal-oriented than relationship-oriented.                                   | C |

- 14 I have not been able to speak up for myself very well. E  
I've said things that others wished they had the guts to say. I
- 15 It has been very difficult for me to stop considering alternatives and do H  
something definite. H  
It has been very difficult for me to take it easy and be more flexible. D
- 16 I have tended to hesitate and procrastinate. B  
I have tended to be bold and domineering. G
- 17 My reluctance to get involved has got me into trouble with people. A  
My eagerness to have people depend on me has got me into trouble F  
with them. F
- 18 Usually, I have been able to put my feelings aside to get the job done. C  
Usually, I have needed to work through my feelings before I could act. E
- 19 Generally, I have been methodical and cautious. B  
Generally, I have been adventurous and taken risks. I
- 20 I have tended to be a supportive, giving person who enjoys the F  
company of others. F  
I have tended to be a serious, reserved person who likes discussing D  
issues. D
- 21 I've often felt the need to be a "pillar of strength". G  
I've often felt the need to perform perfectly. C
- 22 I've typically been interested in asking tough questions and maintaining H  
my independence. H  
I've typically been interested in maintaining my stability and peace of A  
mind. A
- 23 I've generally been too tough and sceptical. B  
I've generally been too soft-hearted and sentimental. F
- 24 I've often worried that I'm missing out on something better. I  
I've worried that if I let down my guard, someone will take advantage of G  
me. G
- 25 My habit of being stand-offish has annoyed people. E  
My habit of telling people what to do has annoyed people. D

- 26 Usually, when troubles have got to me, I've put them on the A  
backburner.  
Usually when troubles have got to me, I've treated myself to something I  
I've enjoyed.
- 27 I have depended on my friends and they have known that they can B  
depend on me.  
I have not depended on people - I have done things on my own. C
- 28 I have tended to be detached and preoccupied. H  
I have tended to be moody and self-absorbed. E
- 29 I have liked to challenge people and "shake them up." G  
I have liked to comfort people and calm them down. F
- 30 I have generally been an outgoing, sociable person. I  
I have generally been an earnest, self-disciplined person. D
- 31 I've usually been shy about showing my abilities. A  
I've usually liked to let people know what I can do well. C
- 32 Pursuing my personal interests has been more important to me than H  
comfort and security.  
Having comfort and security has been more important to me than B  
pursuing my personal interests.
- 33 When I've had conflicts with others, I've tended to withdraw. E  
When I've had conflicts with others, I've rarely backed down. G
- 34 I have given in too easily and let others push me around. A  
I have been too uncompromising and demanding with others. D
- 35 I've been appreciated for my unsinkable spirit and sense of humour. I  
I've been appreciated for my quiet strength and exceptional generosity. F
- 36 Much of my success has been due to my talent for making a favourable C  
impression.  
Much of my success has been achieved despite my lack of interest in H  
developing "interpersonal skills".

### **Scoring:**

Add up the number of times that you have circled each different letter. Match your highest score with the number that corresponds to the letter you circled the most. That highest score will indicate your personality type.

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>
<b>Personality Type :</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>8</b>	<b>5</b>	<b>7</b>

## THE NINE PERSONALITY TYPES

### 1. THE REFORMER

The rational and idealistic type. Conscientious, with a strong sense of right and wrong. Lawyers and teachers, they are agents for change - always striving to improve things but afraid of making a mistake. Moral and ethical, critical and perfectionist. Well-organised, orderly and often very fastidious.

**Worst qualities:** can be impersonal, rigid and emotionally constricted. Problems with anger and impatience.

**Best qualities:** wise, discerning, realistic and noble. Can also be morally heroic.

### 2. THE HELPER

The caring, nurturing type. Empathic, sincere and warm-hearted. People-oriented, friendly, generous and self-sacrificing, but can also be sentimental, flattering and intrusive. Possessive of others, doing things in order to be needed, they have hidden agendas.

**Worst qualities:** proud and self-deceptive, they can feel unappreciated and victimised, and can become manipulative and controlling.

**Best qualities:** unselfish and altruistic, they have unconditional love for others.

### 3. THE MOTIVATOR

The adaptable, success-oriented type. Self-assured, attractive and charming. Ambitious and energetic, but can be too competitive and driven. Image-conscious and overly concerned about what others think of them. Pragmatic chameleons, calculating, saying and doing whatever "works" for them.

**Worst qualities:** often seeking attention and admiration. They can also be arrogant and opportunistic.

**Best qualities:** self-accepting, authentic, everything they seem to be - role models who inspire others.

### 4. THE ARTIST

The intuitive, reserved type. Self-aware, sensitive, introspective and gentle. Individualist, expressive and personal, but they can also be too moody and self-conscious. They tend to dwell in their fantasies, feeling different, melancholy and exempt from the ordinary ways of living.

**Worst qualities:** can become impractical, self-indulgent and self-pitying, and have problems with inhibition.

**Best qualities:** inspired and highly creative, they are able to renew themselves and transform their experiences.

### 5. THE THINKER

The perceptive, cerebral type. Alert, insightful and curious. Independent, innovative and inventive, but can be too preoccupied with their own thoughts. They can be highly strung and intense.

**Worst qualities:** awkward and isolated, they lack interpersonal skills and can be cynical and eccentric.

**Best qualities:** visionary pioneers, they are often able to see the world in a completely new way.

6. THE LOYALIST

The security-oriented and committed type. Often endearing and likeable. Reliable, responsible and trustworthy, but can be partisan and suspicious of others, creating "in" and "out" groups. Evasive and anxious, defensive and contradictory they run on stress.

**Worst qualities:** cautious and indecisive, defiant and rebellious, talking tough and scapegoating others.

**Best qualities:** open-minded, stable and self-reliant, courageously supporting the weak and powerless.

7. THE GENERALIST

The enthusiastic, productive type. Extroverted, optimistic and spontaneous. They are playful, high-spirited, practical and very accomplished but can be over-extended, superficial and ill-disciplined. Acquisitive and seeking constant stimulation, they distract themselves by constantly staying on the go. Uninhibited, excessive and self-centred.

**Worst ability:** can be infantile and demanding, and insensitive to others.

**Best qualities:** they focus their talents on worthwhile goals, becoming appreciative and joyous.

8. THE LEADER

The powerful, aggressive type. Self-confident, strong and assertive. Protective, resourceful, straight-talking and decisive, but can also be proud and domineering. They feel the need to control their environment, and so become confrontational and intimidating. Everything is a contest of wills.

**Worst qualities:** they seldom, if ever, back down. They can become hard-hearted and openly belligerent.

**Best qualities:** self-mastering, they use their strength to improve others' lives, becoming heroic and great.

9. THE PEACEMAKER

The easygoing, accommodating type. Accepting, trusting and stable. Good-natured, optimistic, straight-forward and supportive, but can also be too willing to go along with others to keep the peace. They want things to be smooth and easy; they tend to be complacent, to simplify problems and to minimise everything upsetting. Creatures of habit, they can be passive and unwilling to change.

**Worst qualities:** prone to be stubborn, inattentive and neglectful.

**Best qualities:** all-embracing and indomitable, they are able to bring people together and also heal conflicts.

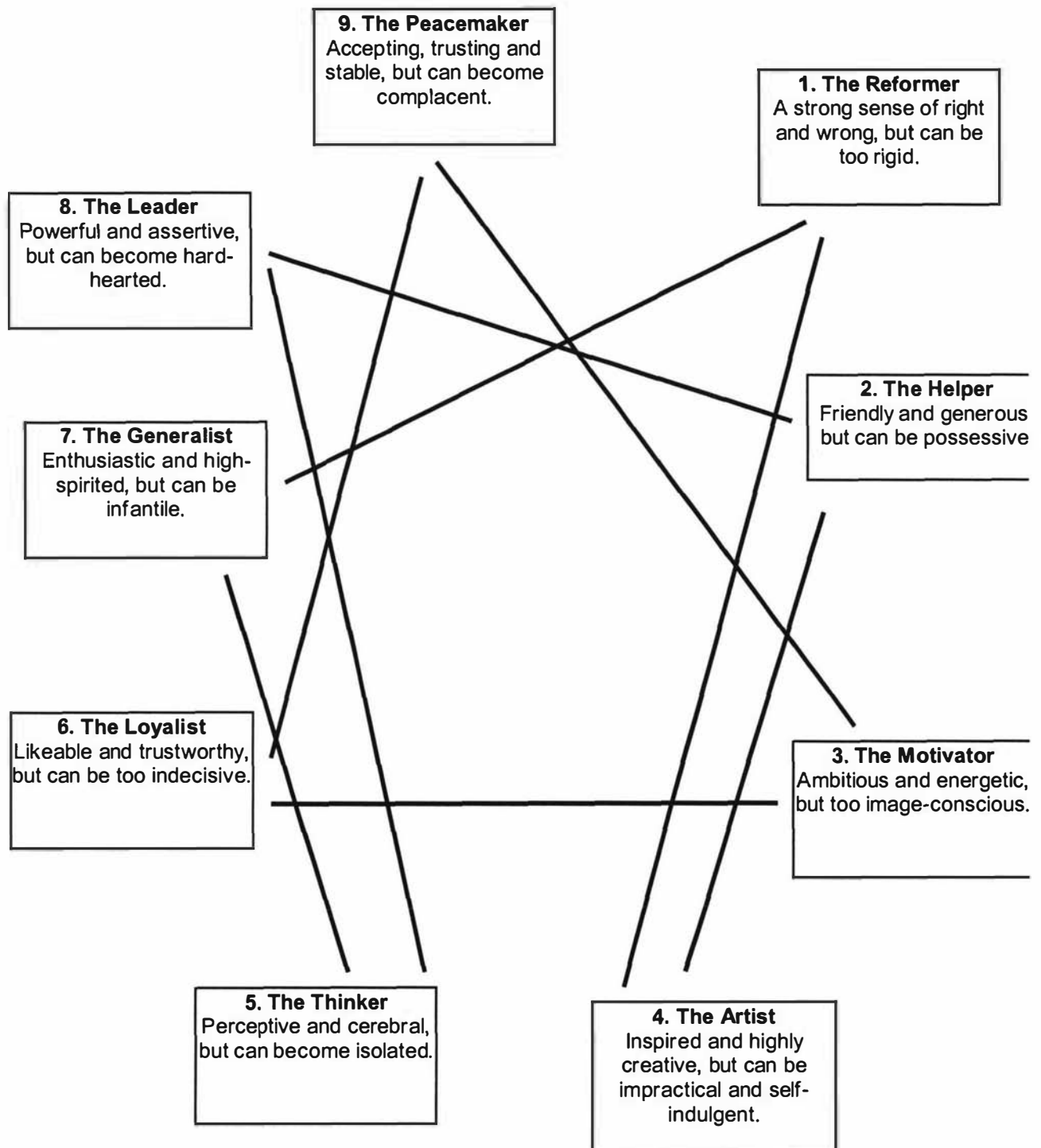
Excerpt from the *Riso-Hudson Enneagram Type Indicator*. For a full questionnaire and analysis of each personality type, read :

*Discovering Your Personality Type* by Don Richard Riso (Jacaranda Wiley).

Further reading: *Enneagram in Love And Work* by Helen Palmer (Harper Collins). *Pocket Enneagram* by Helen Palmer (Harper Collins, available in December). *Personality Types: Using The Enneagram For Self-Discovery* by Don Richard Riso (Harper Collins).

## WHICH TYPE ARE YOU?

Once you've identified your basic type - by answering the questions over the page - look at the two types adjacent to it on the diagram. The one on which you've scored most points is your "wing", or the second side of your personality. It adds different, often contradictory, elements to your basic type. When you're feeling secure, you take on positive characteristics of the type your arrow points towards. Under stress, you assume negative characteristics of the type whose arrow points towards you.



## **The Four basic styles of mentoring**

**Telling** - the mentor endeavours to help by solving the problem for the protégé excluding the protégé. This is common with technical information but may not be so helpful if the protégé is trying to learn and is perhaps stuck at a small obstacle that needs removal.

**Advising** - is another method which is problem solving focused but includes the protégé in the problem solving. The advisor develops options leaving the choice to the protégé. A good process however this may introduce options which are outside the knowledge or expertise of the protégé thus not developing the protégé's own problem solving techniques.

**Manipulating** - This mentor gives the illusion of protégé focus but excludes the protégé from the problem-solving process. The manipulator uses the protégé to satisfy their own needs and wants the protégé in a dependant role.

**Counselling** - A style of helping that is protégé focused and involves the protégé solving the problem. This style is significantly different from the other three. It is a joint solving process which uses the tools available to the protégé including a few learnt from the mentor as part of the process.

An awareness of these styles will help you become a better leader, mentor and protégé.

## **Behaviours to avoid:**

Negative behaviour:

Mentors want good things for their protégés.

They want them to be effective, productive, achieving, successful and happy. In their eagerness they may resort to behaviour that proves less than helpful criticising, giving advice, and rescuing people from their own folly.

**Criticism** is evaluative and judgemental no matter how we sugarcoat it. Alternative: Mentors often give their best when they help their protégés to break out of repetitive negative patterns of behaviour. When a person makes the same mistake repeatedly the solution is to not give them the same answer over and over again.

**Advise:** When we give advice we assume we have superior knowledge, insight or wisdom related to the problem. When dealing with a protégé's personal problem they have all the knowledge!! So listen carefully, feedback showing understanding and empathy, provide ideas/information if asked so this can be incorporated into the solution of the protégé.

**Rescuing:** or attempting to take over the problem is not likely to be helpful in the long run. Temporary help in a crisis may be appropriate, but when there is a recurring pattern of such rescuing the mentor becomes the protégé's problem.

# Appendix K

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Mentor training day feedback form

# SUCCESSFUL MENTORING

## FEEDBACK FORM

Date: \_\_\_\_\_

1 Please indicate your overall impression of the course:

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0	20	30	40	50	60	70	80	90	100
Not at all satisfactory				satisfactory					completely
satisfactory									

2 What do you think were the strengths and weaknesses of the course?

Strengths:

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Weaknesses:

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3 Will the course contribute to your performance in your workplace, and if so, how?

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# Appendix L

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Mentor training feedback form 6 months after training

# SUCCESSFUL MENTORING

## FEEDBACK FORM – 6 months after training

Date: \_\_\_\_\_

- 1 Please indicate whether the course had met your needs for mentoring during the last 6 months.

\_\_\_\_\_

0	20	30	40	50	60	70	80	90	100
Not at all satisfactory				satisfactory				completely	
satisfactory									

- 2 What do you think were the strengths and weaknesses of the course?  
Strengths:

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Weaknesses:

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- 3 How has the course contributed to your performance in your workplace?

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# Appendix M

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Mentor – Protégé(e) contract

