PROACTIVE SOCIALISATION:

A longitudinal investigation of newcomer adjustment inside both an institutionalised and individualised workplace

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Abstract

This thesis adopted a unique approach to the exploration of proactive socialisation and the processes by which a newcomer moves from organisational outsider to insider. Although socialisation involves actions by the individual, the work group, and the organisation, this study is one of the first to investigate how these actions work in tandem to support the adjustment of organisational newcomers.

Research was conducted with a group of 526 participants, drawn from a pool of New Zealand Police (NZ Police) recruits and graduate employees. A quantitative method for data gathering was adopted, with questionnaires administered over a 15-month period for police recruits and 6-month period for graduate newcomers.

Results indicated that prior work quality and quantity, job interest, proactive personality, team support, and leader-member exchange each had an important role to play in the prediction of newcomer role breadth self-efficacy. In turn, newcomers who felt confident in their ability to carry out a broader and more proactive role also enjoyed a higher level of task mastery and group fit. The successful achievement of these proximal outcomes led to other, more distal outcomes, namely performance and organisational commitment. Each of these outcomes was achieved, regardless of the socialising tactics employed by the hiring organisation.

An important feature of this thesis was the design and delivery of a training intervention that was aimed at coaching newcomers in a range of proactive behaviours (i.e., information-seeking, feedback-seeking, positive framing, relationship building, networking, listening, and observation/modeling). Results found that the longitudinal pattern of proaction differed for newcomers in response to the socialising tactics adopted by the organisation. Results also indicated that the impact of training on future proaction was most potent for individuals who already had an elevated level of role breadth self-efficacy, thereby pointing to the importance of building an employee's perception of their own capability. Training was also most effective when key

messages were repeated over multiple sessions, and integrated into the solving of real-world tasks. These results challenge previous studies that have assumed proactivity to be a stable construct over time.

Beyond contributing to the literature on newcomer socialisation, this thesis goes some way to clarifying why proactive people actually succeed. It would seem that proactive people *expect* to be successful, thereby making a training intervention more useful. This thesis also challenges prior research that assumes certain adjustment outcomes are dependent on the socialising tactics adopted by the hiring organisation. Thus, rather than passively adapt to their environment, this research shows how a newcomer can actively shape their own socialising experience. A number of methodological weaknesses found in previous studies have been addressed in this thesis. It also presents a number of practical implications to support the pre-entry, initial entry, and long-term adjustment of seasoned newcomers, versus graduate *Generation Y* employees. Multiple options for future research are also considered.

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CHAPTER 1

NEWCOMER SOCIALISATION AS A RESEARCH AREA

Organisational socialisation refers to the process by which a newcomer acquires the attitudes, behaviour, and knowledge to transition from organisational outsider to insider. In today's knowledge-based economy, individuals are becoming more mobile and moving more frequently between jobs. In New Zealand, approximately 1, 700,000 job candidates were placed between 2006 and 2007 (Statistics New Zealand, 2008), making the efficacy of the socialisation process of critical importance. Several workplace trends including organisational restructuring, corporate takeovers, and technological advancements have also led to a greater number of people needing to adjust to new work situations at a more frequent rate (Finkelstein, Kulas, & Dages, 2003).

As our perception of work and what constitutes work continues to evolve, the need to fine-tune our understanding of the socialisation process is at a premium for the newcomer and his or her employing organisation (Wanberg & Kammeyer-Mueller, 2000). This thesis is an attempt to consolidate our understanding of the socialisation domain, and in doing so, address the lack of clarity (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007), inconsistency (Morrison, 2002), and misunderstandings (Bauer, Morrison, & Callister, 1998) that still exist.

The effective functioning and positive adjustment of new employees to the workplace is particularly desirable from an employer's perspective. If successful, employee socialisation can have a constructive impact on job satisfaction (Jones, 1986), organisational commitment (Allen & Meyer, 1990; Morrison, 1993b), job performance (Kammeyer-Mueller & Wanberg, 2003), as well as facilitate successful career transition (Callister, Kramer, & Turban, 1999). Conversely, poor newcomer adjustment can lead to negative attitudes, poor performance, and turnover (Louis, 1980). In the year to March 2007, there was an average turnover rate of 17% per quarter across the New Zealand private and public sector (Statistics New Zealand, 2008), suggesting that the cost of unsuccessful socialisation attempts can also be tremendous.

Depending on the organisation and role, it may take anywhere from several months or even years for a new employee to 'pay their own way' (Wanous, 1992). In this time, an individual may be proficient in their job and get along with others, but a failure to understand the politics of an organisation could still curtail advancement (Chao, O'Leary-Kelly, Wolf, Klein, & Gardner, 1994). The loss of competitive advantage (Parker, 2000), tardiness and impulsiveness (Hulin, Roznowski, & Hachiya, 1985) contribute to some of the more significant hidden costs of unsuccessful socialisation.

Newcomer adjustment ought to also be of interest to an organisational newcomer. Generally, people who are positively socialised enjoy greater personal income, higher levels of job involvement, are more adaptable, and have a better sense of personal identity than people who are less well socialised (Chao et al., 1994). In addition, they tend to suffer less stress and anxiety at organisational entry (Saks & Ashforth, 1996).

Defining Organisational Socialisation

Much of the research concerning organisational socialisation has emphasised the learning that takes place by the individual who is adjusting to a new or changed job. Traditionally, the process of 'learning' was seen to be largely initiated and directed by the organisation in line with one's status, role, or position. Van Maanen's (1978) usage of the term 'people processing' and his comparison of socialisation to a 'sculptor's mold', implies that socialisation is a process that will yield a predictable outcome regardless of any individual variation. Following this logic, some early research suggests that in order to become a fully functioning and effective insider, newcomers must relinquish certain attitudes, values, and behaviours (Schein, 1968), and "generally accept the established ways of a particular organisation" (Taormina, 1997, p. 29). At its best, Van Maanen (1976) suggests that organisational socialisation should result in the matching or melding of individual and organisational pursuits.

More recently, research has begun to emphasise the role of the newcomer in facilitating his or her own adjustment to the organisation (Crant, 2000; Gruman, Saks, & Zweig, 2006; Morrison, 1993a, 1993b; Ostroff & Kozlowski, 1992; Saks & Ashforth, 1996; Wanberg & Kammeyer-Mueller, 2000). Proponents of this view emphasise the vital role newcomers' play in actively shaping their own work experiences, and

underscore the importance of engaging with one's environment rather than passively reacting to it. In the transformation from outsider to insider, a newcomer can engage in a variety of actions and strategies to make sense of his or her environment, and ultimately enact discernable change (see Saks & Ashforth, 1997a for a summary of relevant research).

An alternative (yet complementary) research strategy to emerge in recent years speculates that newcomer adjustment is dependent not so much on the actual demonstration of proactive behaviour, but on the self-belief that an individual can be proactive (Parker, 1998). Bandura (1986) coined the term *self-efficacy* to refer to "people's judgments of their capabilities to organise and execute courses of action…..It is concerned not with the skills one has but with judgments of what one can do with whatever skills one possesses" (p. 391). When faced with obstacles or potential setback, an individual who lacks self-efficacy will tend to reduce their effort, give up, or settle for a mediocre solution. In contrast, an individual who has a strong self-belief will redouble their effort to master any challenges (Bandura, 2000).

A specific type of self-efficacy that is particularly relevant to newcomer adjustment is *role breadth self-efficacy* (Parker, 1998). This concept concerns the extent to which people feel confident that they can carry out a broader and more proactive role beyond any specific, technical requirements. Role breadth self-efficacy has a broader focus than other forms of self-efficacy in that it is concerned with mastery in a range of tasks (Axtell & Parker, 2003), and is an important determinant of proactive behaviour (Griffin, Neal, & Parker, 2007).

Currently, the socialisation literature offers piecemeal evidence about the relationship between various antecedents and outcomes of adjustments because it largely neglects the mechanisms that might tie these elements together to support newcomer adjustment. In an effort to extend previous research, the first goal of the present study is to test the assumption that role breadth self-efficacy and proactive behaviour each separately and uniquely mediate the relationship between multiple predictor variables and criterion outcomes of socialisation. To date, there is no known, previous research that has considered the mediating influence of both role breadth self-efficacy and proactive behaviour in the same longitudinal model. For the purposes of

this thesis, proactive behaviour has been conceptualised to include seven different active strategies; each of which is supported at a theoretical and empirical level. These strategies include information-seeking behaviour, feedback-seeking behaviour, positive framing, relationship building, networking, observation/modeling, and listening.

As a second contribution, I will explore the extent to which proactive behaviours are trainable and contribute to higher levels of proaction post-training. In the last several years, there has been an increasing move towards the integration of both training and socialisation research streams. To date however, this research has largely omitted exploring the extent to which a person's tendency towards proactive behavior can be increased via training. As a third contribution, I will explore the role and relative importance of multiple predictors of newcomer adjustment at an individual and group level. How each predictor works in tandem to facilitate the achievement of adjustment outcomes that are more proximal (i.e. task mastery, group fit, and role clarity) and distal (i.e., performance and organisational commitment) will also be considered.

Fourth and finally, I will explore the role of each predictor variable, mediating variable, and proximal and distal criterion variable in supporting newcomer adjustment inside both an individualised and institutionalised workplace. Because researchers have tended to explore each socialising environment separately, current literature offers limited insights into the simultaneous role of institutionalised or individualised tactics on newcomer socialisation.

Focus on Newcomer Socialisation

The term 'newcomer' is a label or status applied to an individual who has recently joined an organisation (Rollag, 2007). During the period of early entry, the individual is thought to have few, if any, guidelines to direct behaviour, and the organisation is thought to be the most persuasive (Ashforth & Saks, 1996). Cooper-Thomas and Anderson (2002) found significant adjustment in the socialisation of newcomers in as little as 8-weeks, with the quality of one's initial work experiences shown to be highly correlated with job satisfaction and organisational commitment.

Socialisation is of course an on-going process that begins even before an employee enters the workplace (Feldman, 1976; Feij, 1998) and occurs at all stages of one's career. For individuals who are transitioning from one organisation to another, the socialisation process is thought to be particularly difficult if they have already established ways of working and are required to accept 'new' ways (Bauer et al., 2007). Newcomers transitioning from school to work are also thought to face substantial challenges (Ashforth, 2001). During this period (i.e., roughly between the ages of 19 and 25), other changes occur; such as leaving the parental home, becoming financially independent, and building new relationships. Each of these changes is thought to be particularly influential in later life (Feij, 1998).

To date, socialisation research has tended to rely on a single organisation or professional group, thereby minimising important differences between organisations (Cooper-Thomas & Anderson, 2005). In the present study, two very contrasting groups were selected to explore newcomer adjustment. In line with early socialisation research, the first sample was exclusively made up of recruits training to be police officers with the NZ Police. In contrast, the second sample was made up of graduating students from 10 private and public sector organisations.

On the one hand, NZ Police recruits represent a more seasoned workforce who are socialised separately from other insiders, and in a more formalised, prescriptive, and structured mode. On the other hand, graduate employees typically have very little work experience that relates to their field of study, yet form part of a generation who thrive on freedom and flexibility (Gursoy, Maier, & Chi, 2008). Labeled as members of *'Generation Y'* (or *'Gen Y'*), this group also tends to be very independent, adaptive to change, and questioning of rules (Gursoy et al., 2008). Understanding how to energise and focus the talent of this group should therefore provide a valuable framework for the maintenance of a high achieving workforce and competitive advantage. To support the objectives of this thesis, each graduate was selected on the basis that they were working inside an organisation that would afford them a more unstructured socialisation experience.

<u>Overview of Thesis Structure</u>

This thesis is divided into six chapters. Chapter 1 provides an overview of the socialisation domain as a research area and the specific focus of the present study. Chapter 2 provides an overview of historical socialisation research and tracks the evolution of this domain via four distinct areas. These include (a) the stages of socialisation, (b) the socialising tactics used, (c) cognitive sensemaking, and (d) proactive socialisation. Whereas early research tended to portray the newcomer as a passive recipient of socialisation forces, the more contemporary view elevates the newcomer into a behaviourally active participant in the socialisation process. The evolution of this research domain has ensured a more complete view of newcomer adjustment, and acknowledges the role of both the individual and group in the socialisation process.

Chapter 3 presents a graphical as well as qualitative description of the two theoretical models which underpin the present study; each of which are supported by two sets of hypotheses. Reference is also made to the specific research gaps this study attempts to address. The major features of each participating organisation are detailed more fully in chapter 4, together with an overview of each research measure, and a breakdown of each police and graduate intervention group. Chapter 5 presents all research results for the NZ Police and graduate group and in line with each study hypothesis.

This thesis concludes with a discussion of all major research findings and a psychometric analysis of each newly created measure. In chapter 6, the main contribution of this study is also discussed, together with an overview of methodological strengths and limitations. The latter part of this chapter highlights the implications for management in relation to major research outcomes and summarises future research considerations.

CHAPTER 2

AN OVERVIEW OF NEWCOMER SOCIALISATION RESEARCH

Chapter 2 provides an historical overview of socialisation research. This review is organised around (a) stage models, (b) socialisation tactics, (c) sense-making, and (d) proactive socialisation.

Socialisation Stage Models

A review of the earliest socialisation research necessitates an examination of the various stages through which a newcomer must pass as they develop into an experienced insider. The belief that a naïve newcomer had to progress through various phases of adjustment was typical of the research being presented in the 1970s and received considerable support (Feldman, 1976; Porter, Lawler, & Hackman, 1975; Van Maanen, 1978; Van Maanen & Schein, 1979). In the process of becoming an insider, newcomers were required to internalise a new repertoire of behaviours, and were viewed as relatively passive recipients of a process initiated and executed by socialising agents.

Despite differences in terminology, stage models present a number of common themes, with many talking in terms of a three-stage socialisation process including (a) anticipation, (b) encounter, and (c) adaptation.

Anticipation stage.

Stage one of entry into an organisation has been variously described as 'anticipatory socialisation' (Feldman, 1976), 'pre-arrival' (Porter et al., 1975), and the 'anticipation phase' (Chen & Klimoski, 2003). This period broadly covers the stage before organisational entry, during which time an individual tries to find a role for which he or she is best suited. According to Anderson and Thomas (1996), a newcomer's experience of the organisation during the selection process is likely to affect one's expectations and attitudes, as well as the behaviour one adopts in approaching a potential employer.

Encounter stage.

The second stage of organisational entry has been described as the 'breaking in period' (Feldman, 1976), the 'encounter' phase (Chen & Klimoski, 2003; Porter et al., 1975) or 'entry' (Schein, 1978). This period broadly covers the initial weeks and months of a newcomer's encounter with an organisation. It is during this time an individual is thrust "from a state of certainty to uncertainty; from knowing to not knowing; from the familiar to the unfamiliar" (Van Maanen, 1977, p. 16). In the initial weeks of one's tenure, a newcomer is expected to try and define what they need to do and come to some agreement with team members about the specifics of his or her contribution.

Adaptation stage.

The third and final stage of socialisation signals the complete transformation from newcomer to insider (Louis, 1980). This stage has been variously described as the 'settling in' phase (Feldman, 1976), the 'change and acquisition' phase (Porter et al., 1975), and the phase of 'mutual acceptance' (Schein, 1978). It is during this period that a newcomer needs to resolve two types of conflict; namely the conflict between one's work and home life, and the conflict between in-group and out-group members in the organisation itself (Feldman, 1976). Considered less of a stage and more of a state of being socialised, the newcomer who is fully adapted is expected to understand 'how things really work' inside the employing organisation (Fisher, 1986; Schein, 1978).

The accumulated research on stage models has been reviewed three times (Fisher, 1986; Wanous 1992; Wanous & Colella, 1989). Together these reviews suggest that the evidence is weak in support of a lock-step, sequential unfolding of socialisation. Having said this, stage models have made some important contributions to our understanding of the socialisation process. Firstly, these models recognise that there is a distinction between the experiences of organisational 'insiders', 'newcomers' and 'outsiders'. They acknowledge that in transitioning towards becoming an insider, a newcomer will undergo a degree of change, and that it is one's ability to adapt to this change which separates the more socialised individual from his or her less socialised peers.

Socialisation Tactics

In recognition that not all individuals are socialised equally, researchers by the late 1970s began to explore the organisational factors that influenced socialisation outcomes (Van Maanen, 1978; Van Maanen & Schein, 1979). Generally regarded as the closest thing in the literature to a testable theory of socialisation, Van Maanen and Schein proposed six tactics which allow the organisation to structure a newcomer's experiences and transfer them information.

Each of these six tactics is arranged on either end of a bipolar continuum as shown in Table 1. As such, rather than see socialisation as 'collective' or 'individual', 'formal' or 'informal', it is perhaps more appropriate to consider socialisation as more or less collective or more or less formal. Further, Van Maanen and Schein (1979) suggest that these tactics "are not tied to any particular type of organisation, [and] theoretically, at least, can be used in virtually any setting in which individual careers are played out" (p. 231). While there is considerable support for the basic proposition on which this theory sits, (Allen & Meyer, 1990; Ardts, Jansen, van der Velde, 2001; Ashforth & Saks, 1996; Cable & Parsons, 2001; Jones, 1986; Kim, Cable, & Kim, 2005), subsequent research has found that certain modes of socialisation are more likely to be associated with one organisational context than another.

One of the first empirical studies to test the influence of various socialisation tactics on newcomer adjustment was conducted by Jones (1986). In his research, Jones found that the six tactics proposed by Van Maanen and Schein (1979) could be categorised into two broad divisions that sat along a single continuum. In particular, he argued that collective, formal, sequential, fixed, serial, and investiture tactics best represented a more 'institutionalised' mode of socialisation. Collectively, these tactics facilitated less role conflict, ambiguity, and intentions to quit, as well as higher job satisfaction and commitment. At the other end of the continuum, Jones argued that individual, informal, random, variable, disjunctive, and divestiture tactics represented a more 'individualised' mode of socialisation. While this environment was associated with relatively high levels of role conflict and ambiguity, it also fostered a more innovative approach to work.

Table 1
Definition of Socialisation Tactics

	Institutionalised		Individualised
Tactics mainly concerned with **CONTEXT**	**Collective** Socialises individuals as a group and put through a common set of experiences.	←→	**Individual** Socialises individuals singly, and exposes them to unique experiences.
	Formal Initial segregation of individuals from more experienced employees for the period of training.	←→	**Informal** Immediate integration of newcomers with more experienced members.
Tactics mainly concerned with **CONTENT**	**Sequential** Transition through the organisation is marked by a series of discrete and identifiable stages that lead to mastery of a job.	←→	**Random** Transition through the organisation is marked by unsystematic, vague or a continually changing sequence of steps.
	Fixed Transition through the organisation is fixed in a time scheme or path.	←→	**Variable** Transition through the organisation is variable, and based on individual progress.
Tactics mainly concerned with **SOCIAL ASPECTS**	**Serial** Newcomer socialisation by experienced members who can function as mentors and role models.	←→	**Disjunctive** Newcomer learning of the job and role is unaided.
	Investiture Seeks to build upon, and value the newcomer's identity and personal attributes.	←→	**Divestiture** The newcomer's identity and values are denied and changed somehow by the organisation.

Note. Adopted from Jones' (1986) three-dimensional grouping and Van Maanen and Schein's (1979) typology. Investiture is classified as an institutionalised tactic based on Allen and Meyer (1990) and Jones (1986).

In the context of the present study, the NZ Police can be thought of as representing an institutionalised workplace. Recruit newcomers will experience a common set of learning experiences (i.e., collective) that take place away from other more experienced police personnel (i.e., formal). They are provided with explicit guidelines about the sequence and timing of their progress through the organisation (i.e., sequential, fixed), and will have access to senior role models (i.e., serial) to guide their learning. The NZ Police culture will also help a new recruit confirm his or her identity inside the organisation (i.e., investiture). In contrast, the workplace of each graduate employee in the present study is more representative of an individualised environment. Unlike the NZ Police, graduate newcomers will be exposed to unique socialising experiences (i.e., individual), that take place inside the workplace and alongside more experienced staff (i.e., informal). In an individualised setting, graduates are typically provided with little information about the sequence and timing of progress through the organisation (i.e., random, variable) and need to develop their own networks (i.e., disjunctive). Such treatment by the organisation is thought to undermine the graduate's identity (i.e., divestiture).

In addition to categorising Van Maanen and Schein's (1979) tactics along an institutionalised - individualised continuum, Jones (1986) also saw value in grouping each tactic into three dimensions: 'context', 'content', and 'social' depending on their primary focus. As shown in Table 1, the context dimension concerns the structure of the socialisation experience. Whereas collective and formal tactics represent a high level of structure, individual and informal approaches do not. The clarity of communication around the sequence and timing of socialisation is captured by the content dimension. Whereas sequential and fixed tactics represent clear communication, random and variables tactics do not. Finally, newcomer access to support in the form of role models and experienced insiders is captured by the social dimension of socialisation. Whereas serial and investiture tactics reflect the presence of support, disjunctive and divestiture tactics represent a lack of support.

The composition of the individualised and institutionalised dimensions offered by Jones (1986) is slightly inconsistent with the original conceptualisation offered by Van Maanen and Schein (1979). Most notably, Jones proposed that by disconfirming a newcomer's expectations about themselves through negative social experiences (i.e., a

divestiture tactic), an individual may be encouraged to excel in his or her role and question the environment. Conversely, Jones argued that confirming a newcomers' identity early in their organisational tenure may paradoxically lead to a more custodial orientation. Over the last two decades, a number of studies have replicated and extended Jones' work and have adopted his operationalisation of investiture.

Institutionalised modes of socialisation are generally associated with higher levels of job satisfaction and organisational commitment as well as decreased intentions to leave, less role conflict, role ambiguity, and stress (Ashforth & Saks, 1996). Additional research has also shown institutionalised tactics to be associated with greater person-organisation fit (Cable & Parsons, 2001; Kim et al., 2005; Riordan, Weatherly, Vandenberg, & Self, 2001), as well as satisfaction with organisational communication and confidence in one's supervisor (Mignerey, Rubin, & Gorden, 1995). In contrast, individualised modes of socialisation are generally associated with role innovation, goal-directed behaviour, and superior performance (Ashforth & Saks, 1996), higher levels of voluntary turnover, and job change (Ardts et al., 2001).

Socialisation Tactics Research Within a Para-Military Context

Over the last 3 decades, military and para-military environments have provided a rich source of material for researchers wishing to explore the socialisation domain. One of the earliest studies of socialisation was conducted by Van Maanen (1975) and involved surveying a group of American police recruits over a period of 30-months. In his research, Van Maanen exemplified the usefulness of collective, formal, sequential, fixed, serial, and divestiture tactics in the adjustment of police officers. More recently, others have verified his work (Cooper-Thomas & Anderson, 2002; Stradling, Crowe, & Tuohy, 1993). In a longitudinal study of British army recruits, Cooper-Thomas and Anderson found that institutional modes of socialisation were positively linked to job satisfaction, organisational commitment, and information acquisition.

Not all research has found that the safe, affirming environment promised by institutionalised socialisation results in a positive outcome for newcomers. In particular, Van Maanen (1978) suggests that institutional socialisation can still contribute to periods of personal stigmatisation and disenchantment for new police recruits. Stigmatisation can be brought about by having to wear recruit identifying

clothes and cope with demeaning job titles such as 'rookie'. Disenchantment can come from an inability to see the link between skills learnt in a setting that is segregated from on-the-job reality (Van Maanen, 1975). Such findings go some way towards explaining why police recruits often demonstrate a high level of organisational commitment during training, but rapidly decrease in their intentions to stay upon entering the field (Beck & Wilson, 1998). Research by Chan (2001) attributes this decline in recruit commitment to the realisation that day-to-day police work is far removed from the idealised expectations that are established during formalised, institutionalised training.

While the importance of these findings is not in doubt, it may be argued that police recruits do not represent the typical job newcomer. Most notably, police recruits have experiences not shared by other employees, including extensive pre-entry training, entry as part of a large cohort, and participation in an intensive training programme that offers little variation. Subtle differences do however exist in the socialisation experiences of newcomers inside a military context (Cooper-Thomas & Anderson, 2002), thereby substantiating the worth of the NZ Police as a research group. It is also anticipated that results from the present study will generalise to other settings where newcomers are socialised in a structured, sequential, and collective manner (e.g., accounting or legal firms).

Socialisation Tactics Research with Graduate Newcomers

The socialisation literature has also been criticised for its reliance on new graduate employees entering their first job (Bauer et al., 1998). Having said this, the start of a new job directly out of university represents a particularly intense period of transition that makes a graduate cohort worthy of study (Bauer & Green, 1998). The experiences of this group during the first couple of months are also thought to have important consequences for one's career progress and future career opportunities (Lubbers, Loughlin, & Zweig, 2005).

Ashforth and Saks, together with their colleagues have undertaken some of the most comprehensive research involving graduate employees in the last 13 years (Ashforth, 2001; Ashforth & Saks, 1996, 2000; Ashforth, Saks, & Lee, 1998; Ashforth, Sluss, & Saks 2007; Gruman et al., 2006; Saks & Ashforth, 1996, 2000; Saks, Uggerslev, & Fassina, 2007). In particular, they have found that proactive behaviour

among university graduates is positively related to future learning (Ashforth et al., 2007), and that proactive role innovation is dependent on having a sense of control over one's work output (Ashforth & Saks, 2000). In line with this, Gruman et al., (2006) found that graduate newcomers were more likely to engage in proactive behaviour when the workplace was structured and formalised. At an organisational level, Saks et al., (2007) also found that serial and investiture tactics were the most strongly related to adjustment outcomes for graduate newcomers. This finding is consistent with Jones (1986) who endorsed the importance of these tactics "because they provide the social cues and facilitation necessary during learning processes" (p. 266).

As a word of caution, Gruman et al., (2006) acknowledge the risk of attempting to generalise findings from a recent graduate pool to experienced newcomers who might be savvier with respect to organisational adjustment. Having said this, results from a graduate sample should still be generalisable to other graduate employees whose socialisation experience incorporates a wide variety of entry-level jobs.

Summary

With the weight of all socialisation research conducted over the last 3 decades, it is clear that organisations can influence newcomer adjustment by way of how they structure one's entry experiences. In particular, institutional modes of socialisation should be most appropriate in large and mechanistic organisations that need to protect their investment in high-risk jobs (Ashforth et al., 1998). In this context, the deployment of institutionalised tactics should foster conformist and emotionally committed newcomers who have little intention to leave the organisation and who understand and accept organisational values (Ardts et al., 2001; Griffin, Colella, & Goparaju, 2000). In contrast, organisations should employ individualised tactics if they do not want to offer a job for life and are less concerned about emotionally attached, loyal employees (Ardts et al., 2001).

What this research does not address, is why newcomers entering the same organisation, who undertake the same job, and who experience the same socialisation tactics may not be equally socialised. In an effort to understand this, researchers in the early 1980s began to explore the role of the individual in the socialisation process.

Cognitive Sense-Making Theory

Early research into newcomer adjustment focused on "…the ways in which [newcomers] internally process their experiences…" (Louis, 1980, p. 235). This research tended to focus on the thought processes and cognitive coping mechanisms used by individuals to interpret their experiences once inside an organisation and the individual differences that might inhibit sensemaking.

Several authors have described organisational entry as a period of tremendous uncertainty and ambiguity, particularly when one's assumptions about events and behaviour does not conform to organisational reality (Feldman & Brett, 1983; Jones, 1986; Kim et al., 2005; Miller & Jablin, 1991; Saks & Ashforth, 2000). Louis (1980) identified three categories to distinguish between different features of the entry experience. *Change* is said to represent "the external, objective differences in moving from one organisation to another" (p. 244). *Contrast* refers to "those differences that emerge…as personally significant...subjectively experienced characteristics of the new situation" (p. 244). *Surprise* represents "differences between newcomers' anticipations of and actual experiences in the organisation" (p. 244). To some extent, each of these conditions is thought to contribute to a sense of 'reality shock' as old roles are discarded and new ones are taken on. In making sense of the surprise, newcomers may be forced to re-evaluate their assumptions and seek information to explain why people behave the way they do (Jones, 1986).

Cognitive sense-making theory has undoubtedly contributed to our understanding of organisational socialisation. That said, some researchers still challenge the extent to which newcomer surprise need occur, arguing that the quality of information provided about the job and organisation should directly reduce uncertainty and role stress (Ashforth & Saks, 1996; Jones, 1986). Past experience with similar situations is also thought to assist newcomer coping (Bauer & Green, 1994), as well as an internal locus of control (Louis, 1980), and high self-efficacy (Jones, 1983). More recently, Bravo, Peiro, Rodriguez, and Whitely (2003) found that newcomer uncertainty and stress was greatly reduced by a combination of organisational tactics and high-quality team and superior relations.

While sense-making theory does acknowledge the role of the newcomer in the adjustment process, this role is still passive. To address this shortcoming, a separate stream of research evolved in the 1980s which specifically focused on the proactive role of newcomers in shaping their own socialising experience (Ashford & Black, 1996; Ashford & Taylor, 1990; Crant, 2000; Fisher, 1986; Gruman et al., 2006; Major & Kozlowski, 1997; Miller & Jablin, 1991; Morrison 1993a, 1993b; Wanberg & Kammeyer-Mueller, 2000). This shift in research signaled a more complete view of socialisation that was driven by organisational forces as well as newcomer initiatives.

<u>Socialisation as a Proactive Process</u>

Recognising that newcomers can facilitate their own adjustment has provided researchers with a 'new theoretical lens' (Marrone & Taylor, 2004) through which the socialisation experience can be explored. As work becomes more dynamic and decentralised, several authors have noted the increasing importance of proactive socialisation as a mechanism for newcomers to remain competitive in their careers (Parker, 2000), to better align themselves to their surroundings (Crant, 2000), and be self-starting (Parker, Williams, & Turner, 2006).

<u>A Definition of Proactive Socialisation</u>

To date, the proactive socialisation domain has been conceptualised in a variety of ways, such that there are no clear guidelines as to what it constitutes, or what should be included in such a study (Crant, 2000; Saks, Taggar, & Ashforth, 2004). In an effort to integrate the various research streams, Crant defines proaction as "taking initiative in improving current circumstances…[and] challenging the status quo rather than passively adopting to present conditions" (p. 436). Frese and Fay's (2001) concept of personal initiative has a similar intent, in that it is self-starting (i.e., doing something without being told), proactive (i.e., identifying potential future problems and opportunities), and persistent (i.e., focused on overcoming barriers). In a similar vein, Parker et al., (2006) emphasise an active effort on the part of the newcomer to consciously influence his or her new surroundings, while Tekleab (2004) talks about actively gathering information on the task, role, group, and organisation through personal initiatives.

A common thread binding these various conceptualisations is an appreciation of the active role a newcomer can adopt in order to create more favourable work conditions. This is in contrast to a more reactive pattern of behaviour and passive response to information and opportunities (Bateman & Crant, 1993). Against this backdrop of research, it is not surprising that several studies have revealed a positive link between proactive behaviour and outcomes such as leadership effectiveness (Bateman & Crant, 1993), salary and career promotions (Seibert, Crant, & Kraimer, 1999), and individual innovation (Seibert, Kraimer, & Crant, 2001). Because of its wide-ranging impact, Crant (2000) suggests that proaction has the potential to be a "high-leverage concept rather than just another management fad" (p. 435).

An Overview of Proactive Socialisation Research

The concept of proactive socialisation has been explored from both a dispositional and situational perspective and in terms of various outcomes. At a dispositional level, Ashford and Black (1996) found that a desire for control predicted information-seeking, socialising, job change negotiation, networking, and positive framing. Wanberg and Kammeyer-Mueller (2000) found that newcomers with a high level of extraversion engaged in more feedback-seeking and relationship building, while openness to new experiences predicted feedback-seeking and positive framing. Research has also shown that individuals with a high level of role breadth self-efficacy are more inclined to make proactive suggestions for work improvement (Axtell, Holman, Unsworth, Wall, & Waterson, 2000), demonstrate more proactive performance in jobs of high autonomy (Parker, 2007), and engage in proactive problem solving and proactive idea implementation (Parker et al., 2006).

Some researchers maintain that newcomer proaction is more a function of the environment in which one works, and highlight the dual role of supervisors and team members in this process (Major, Kozlowski, Chao, & Gardner, 1995; Reichers, 1987). For example, research has found that managers can foster newcomer proaction by neutralising the anxiety that often accompanies organisational entry (Louis, 1980; Miller & Jablin, 1991) as well as reward certain behaviours and communicate expectations (Feij, 1998; Manz & Sims, 1981). Managers can also be available and helpful to newcomers (Louis, Posner, & Powell, 1983) and encourage a strong leader-member exchange (Liden, Wayne, & Stilwell, 1993). The importance of the work

group in facilitating newcomer adjustment is also well established. In particular, work peers have been found to shape and direct personal values (Cable & Parsons, 2001; Chatman, 1991), communicate group norms (Feldman, 1981), reduce stress and anxiety (Nelson & Quick, 1991), and guide performance (Chen & Klimoski, 2003).

The specific tactics a newcomer might use to facilitate his or her own adjustment has also received considerable attention. Of all proactive tactics, newcomer information-seeking is one of the most frequently studied in the last 2 decades (Griffin et al., 2000; Saks & Ashforth, 1997a; Marrone & Taylor, 2004). Ostroff and Kozlowski (1992) explored newcomer information gathering from three interpersonal sources: (i.e., mentors, supervisors, and coworkers), and three non-interpersonal sources: (i.e., observation, experimentation, and objective referents). In addition, they considered information gathering inside multiple, different content areas (i.e., the task, role, group, and organisation). Results showed that newcomers relied heavily on experimentation and observation to acquire task and role-related information. Alternatively, supervisors and team members were found to be more important in terms of newcomer satisfaction, commitment, and feelings of adjustment.

While information-seeking remains an important research topic, other 'mindful' strategies (Feldman & Brett, 1983) have also been explored through the lens of proactive socialisation. In particular, Ashford and Black (1996) explored the role of seven proactive tactics (i.e., feedback-seeking, information-seeking, networking, general socialising, positive framing, job change negotiation, and relationship building with one's manager). Of all these tactics, relationship building was the only one to significantly link to performance, while positive framing and general socialising predicted job satisfaction. More recently, Wanberg and Kammeyer-Mueller (2000) found that relationship building (together with feedback-seeking) was linked to a number of important work outcomes, such as task mastery, work group integration, and political knowledge. Behavioural researchers also suggest a pathway between proactive self-management and important work outcomes. In particular, Saks and Ashforth (1996) found that newcomers who relied on self-observation, self-reward, self-punishment, goal setting, and rehearsal had lower levels of general anxiety and stress at entry, and more positive work outcomes 6-months later.

Numerous studies have examined the outcomes of proactive socialisation, with particular emphasis on results that are more proximal in the socialisation process, as well as those that are more distal. Proximal outcomes occur early in the socialisation process (Carr, Pearson, Vest, & Boyar, 2006; Kammeyer-Mueller & Wanberg, 2003), and lead to more distal outcomes as the socialisation process unfolds. While distal outcomes reflect a concern for *what* is being learnt, proximal outcomes are related to *how* and *why* learning occurs (Reio & Callahan, 2004). Morrison (1993a, 1993b) found that the frequency of information-seeking was positively related to three proximal outcomes (i.e., task mastery, role clarity, and social integration) as well as three distal outcomes (i.e., satisfaction, performance, and intentions to leave). Research by Kammeyer-Mueller and Wanberg (2003) also found that role clarity was positively related to work engagement (a proximal outcome) and organisational commitment (a distal outcome).

Bauer et al., (1998) are among the first researchers to suggest that newcomer proaction should be studied in the context of other variables, such as organisational tactics. In an effort to direct future empirical work, Griffin et al., (2000) proposed a theoretical model in which they predicted certain organisational tactics would facilitate various proactive responses. On the one hand, Griffin et al., argued that newcomer proaction would matter less in an institutionalised environment where experiences are structured and uniformly applied. On the other hand, any proactive behaviour that is aimed at minimising uncertainty should have a positive impact in an individualised workplace. Marrone and Taylor (2004) concur, suggesting that the pressure to conform inside an institutionalised environment should discourage any creative or innovative thinking. In contrast, such behaviour would be mandatory inside a less structured workplace if an individual is to successfully transition into a new role.

Numerous empirical studies have linked individualised work settings with active information-seeking, goal-directed, and innovative role behaviours (Allen & Meyer, 1990; Ashforth & Saks, 1996; Jones, 1986; Mignerey et al., 1995). There is however, sufficient empirical research to support the argument that institutionalised socialisation can also facilitate a more innovative, less custodial role orientation. For example, Saks and Ashforth (1997b) found that institutionalised modes of socialisation (i.e., collective, serial, and investiture) positively predicted the frequency of newcomer feedback-

seeking and observation from team members and supervisors. Newcomers exposed to institutional modes of socialisation (i.e., sequential, fixed, serial, and investiture) also experienced more supportive interactions with organisational insiders (Cable & Parsons, 2001), thereby contributing to the development of positive social networks and acceptance.

On the basis of these research findings, it would seem that rather than stifle initiative and action, an institutionalised environment might actually propel newcomers into self-directed activity. Counter to common perception, institutional socialisation might act as a signal to newcomers, letting them know that they are valued organisational members who have an "important, meaningful, effectual and worthwhile" role to play (Pierce, Gardner, Cummings, & Dunham, 1989, p. 625). On the basis of available evidence, arguments can be advanced to explain why institutionalised *and* individualised tactics both support a proactive role orientation.

In summary, proactive research has dramatically extended our understanding of newcomer socialisation. Despite the importance of this research area, there are still several questions that remain unanswered.

<u>Gaps in the Socialisation Literature</u>

<u>A model of proactive socialisation.</u>

Perhaps the single most striking omission from socialisation research to date is the absence of any comprehensive model of the proactive process that moves an 'outsider' to an 'insider'. Without any agreement on how to best conceptualise proactive socialisation, researchers have explored this domain from a myriad of perspectives. While undoubtedly a complex phenomenon, proactive research is still as theoretically and conceptually fragmented as the wider socialisation domain was some 25 years ago. It is 12 years since Saks and Ashforth (1997a) made their plea for a more interactionist perspective in relation to socialisation research, yet since this time, few studies are known to have taken up this challenge (see Bauer et al., 2007 for a review of relevant research).

Two individual differences which could usefully be explored as mediators in the socialisation process are *proactive behaviour* and *role breadth self-efficacy*. While proactive behaviour concerns the demonstration of active, self-starting behaviour (Crant, 2000), role breadth self-efficacy concerns an individual's self-belief that they are able to carry out a proactive range of tasks, regardless of whether they are allowed to, or do perform them (Parker, 1998). Previous studies have found that role breadth self-efficacy and newcomer proactive behaviour are both related to important socialisation outcomes (see Crant, 2000 for a review of relevant research).

What is less clear from this research is *how* newcomers with a proactive disposition or the self-efficacy to succeed beyond role requirements actually facilitate their own adjustment. On the one hand, Gruman et al., (2006) found that newcomer proactivity was an important mediator in the relationship between self-efficacy and a number of socialisation outcomes. These results suggest that self-efficacy operates through proactivity to facilitate newcomer adjustment. On the other hand, it is equally plausible that the self-belief to succeed is a more important variable for understanding the process from organisational outsider to insider. In support of this proposition, research has found that individuals who feel capable of performing particular tasks tend to not only carry them out more effectively (Barling & Beattie, 1983) but persist at them longer (Lent, Brown, & Larkin, 1987).

The work of Parker and colleagues (Axtell & Parker, 2003; Parker 1998, 2000, 2007; Parker et al., 2006) is unique in that it recognises the relatively malleable and situationally-specific nature of self-efficacy, whereas other researchers have tended to use a generalised and stable self-efficacy measure (Chen, Gully, Whiteman, & Kilcullen, 2000). Past research into the mediating role of proactive behaviour is also problematic in that there is no universal agreement as to what behaviours are 'proactive'. Whereas one behaviour might be unusual and nonstandard in one environment, it could be routinely applied in another (Frese & Faye, 2001). It is also 13 years since Ashford and Black (1996) first published their review of newcomer proaction in the context of seven different strategies. Of these strategies, the only one to have been given prominence over the intervening years has been information-seeking behaviour. Collectively, this research has far outweighed the exploration and study of

all other proactive behaviours. In the absence of more complete research, the relative importance of behavioural tactics in facilitating newcomer adjustment is still unclear.

Individual and group-level predictors.

The extent to which newcomer cognitive processes either support or inhibit newcomer adjustment is another area worthy of exploration. At an individual level, previous research has revealed the importance of multiple dispositional traits (see Grant & Ashford, 2008 for a review of relevant research). Omitted from this review are studies which explore the impact of cognitive ability on newcomer socialisation. This is surprising given the tremendous volume of work that has already linked cognitive functioning to performance in all job types (Schmidt & Hunter, 1998, 2004).

The importance of organisational insiders (i.e., superiors, team members, peers, and secretarial staff) in supporting newcomer adjustment is well established (Anakwe & Greenhaus, 1999; Bauer & Green, 1998; Cable & Parsons, 2001; Chatman 1991; Chen & Klimoski, 2003; Filstad, 2004; Thomas & Anderson, 1998). What still remains unclear is the specific role of the team in facilitating newcomer proaction and role breadth self-efficacy. Managers also play an important role in facilitating newcomer adaptation, particularly early on in the relationship (Bauer & Green, 1998). Leader-member exchange theory is a unique stream of research that focuses on the different types of exchange a manager has with each subordinate. While research has found that a high-quality exchange contributes to important individual and organisational outcomes, more research is needed to verify the extent to which these relationships are mediated by proactive behaviour and role breadth self-efficacy beliefs.

Linking proximal with distal socialisation outcomes.

An exciting evolution in the socialisation domain has been the clustering of outcomes into those that are more proximal and distal in the learning process (Carr et al., 2006; Chan & Schmitt, 2000; Kammeyer-Mueller & Wanberg, 2003; Morrison, 1993a, 1993b). This research is still in its infancy however, and typically focuses on individual-level outcomes such as task mastery and performance (Marrone & Taylor, 2004). As a consequence, potential outcomes that occur at a group or organisational level tend to be excluded, such as group fit, role clarity, and organisational commitment. The present study offers a unique opportunity to consider the relative importance of

multiple proximal outcomes in the achievement of more distal goals, and the extent to which these connections are underpinned by a proactive outlook and self-efficacy beliefs.

Linking training and socialisation literatures.

Two decades ago, Feldman (1989) identified training as playing "a major role in how individuals make sense of and adjust to their new job settings" (p. 399). Since this time, others have hypothesised the benefit of training (Gruman et al., 2006; Saks & Ashforth, 1997a), and have called for more cross-fertilisation of research areas (Crant, 2000). To date, there is only a very small, albeit important body of research that links the training and proactive socialisation literature (Axtell & Parker, 2003; Kirby, Kirby, & Lewis, 2002). The scarcity of research exploring the training-proaction link is understandable. Not only is this an expensive organisational investment, but secondly, if there is limited opportunity to practice newly learnt proactive behaviours, any gains associated with training could be lost (Parker, 1998). Given the considerable investment made in training interventions (Salas & Cannon-Bowers, 2001), the long-term usefulness of exploring training in the context of socialisation research is worthy of further investigation.

The socialising environment.

Finally, while numerous studies identify both individualised and institutionalised workplaces as supporting newcomer adjustment, only a handful of studies have explored the relative importance of both environments in supporting adjustment outcomes (Ashforth & Saks, 1996; Cooper-Thomas & Anderson, 2002; Griffin et al., 2000; Gruman et al., 2006). Some confusing results presented by Gruman et al., endorse the value of longitudinal design across both contexts.

In conclusion, proactive behaviour and role breadth self-efficacy are two important constructs in the socialisation domain. While they have appeared in many different research streams, there is still little cross-fertilisation. Future empirical work is clearly needed to (a) establish a comprehensive model of the proactive socialisation process, (b) identify the range of tactics available to support an individual's proactive effort and role breadth self-efficacy beliefs, (c) integrate the individual, group, and organisational factors contributing to newcomer adjustment, and (d) specify the

relationship between various proximal and distal outcomes of socialising effort. If we accept the argument that successful socialisation is more crucial than ever given the changing nature of work, researchers must also more clearly specify the role of training in facilitating positive work outcomes.

Summary

In the first part of chapter 2, consideration was given to the various stages through which newcomers are thought to pass as they move from outsider to organisational insider. Attention was also directed towards the various socialisation tactics used by an organisation to help facilitate this transition. In the latter part of chapter 2, consideration was given to the cognitive, or sensemaking role newcomers play in supporting their own adjustment. Despite making some important contributions, such research still portrayed newcomers as passive or reactive recipients in the socialisation process. While proactive socialisation research recognises the newcomer as an active agent in his or her own adjustment, there are still multiple gaps that are worthy of further exploration.

CHAPTER 3

A THEORETICAL MODEL OF PROACTIVE SOCIALISATION

Chapter 3 presents two theoretical models of proactive socialisation. Each model supports a set of hypotheses that will be discussed in the context of current research from the socialisation domain. In Model A (Figure 1), multiple individual and group-level predictor variables are hypothesised to facilitate role breadth self-efficacy among NZ Police recruits and graduate newcomers. In turn, role breadth self-efficacy is hypothesised to positively influence three proximal criterion outcomes of adjustment: task mastery, group fit, and role clarity. The emphasis here is on what people feel they can do, not on what people actually do to facilitate task, group, and role success. Model A also recognises that role breadth self-efficacy is an important precursor of proactive behaviour, and is a relationship moderated by training.
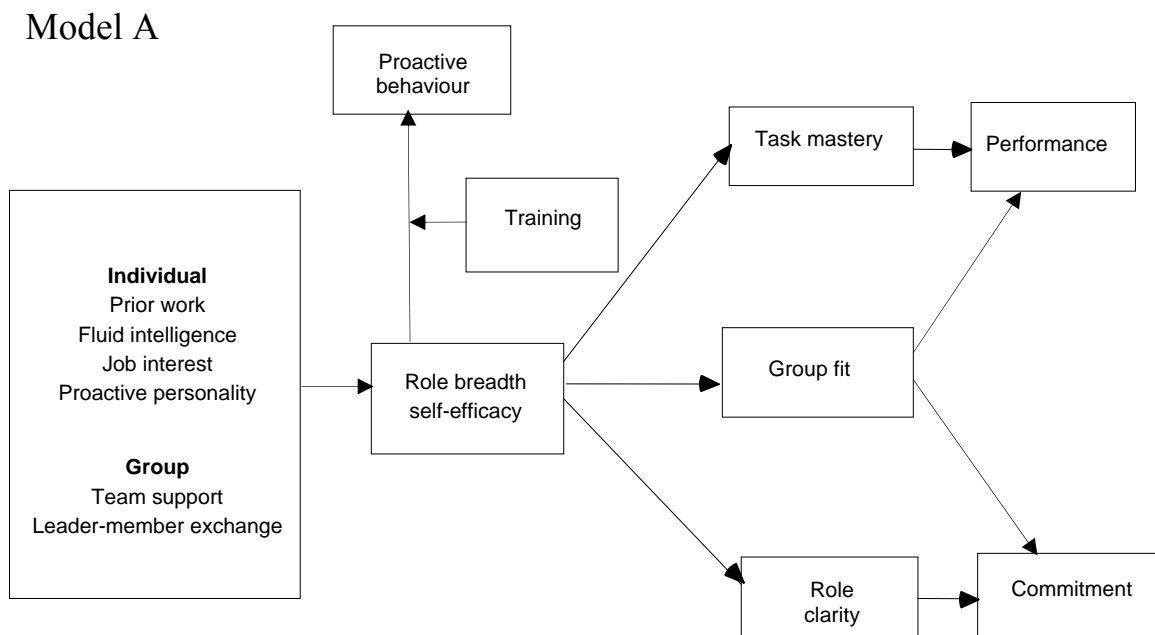
Model A

Figure 1. Hypothesised Model A of newcomer proactive socialisation.

In Model B (Figure 2), role breadth self-efficacy is replaced by proactive behaviour as the primary conduit between multiple predictor variables and various criterion outcomes of adjustment for NZ Police and graduate newcomers. In Model B, proactive behaviour during organisational entry is predicted to be an outward manifestation of having a proactive personality as well as (among other things) role breadth self-efficacy. Individuals with a more proactive personality are hypothesised to benefit from training that is aimed at enhancing one's use of multiple proactive behaviours. In line with Model A, each proximal outcome is also expected to support newcomer performance and organisational commitment.

Model B
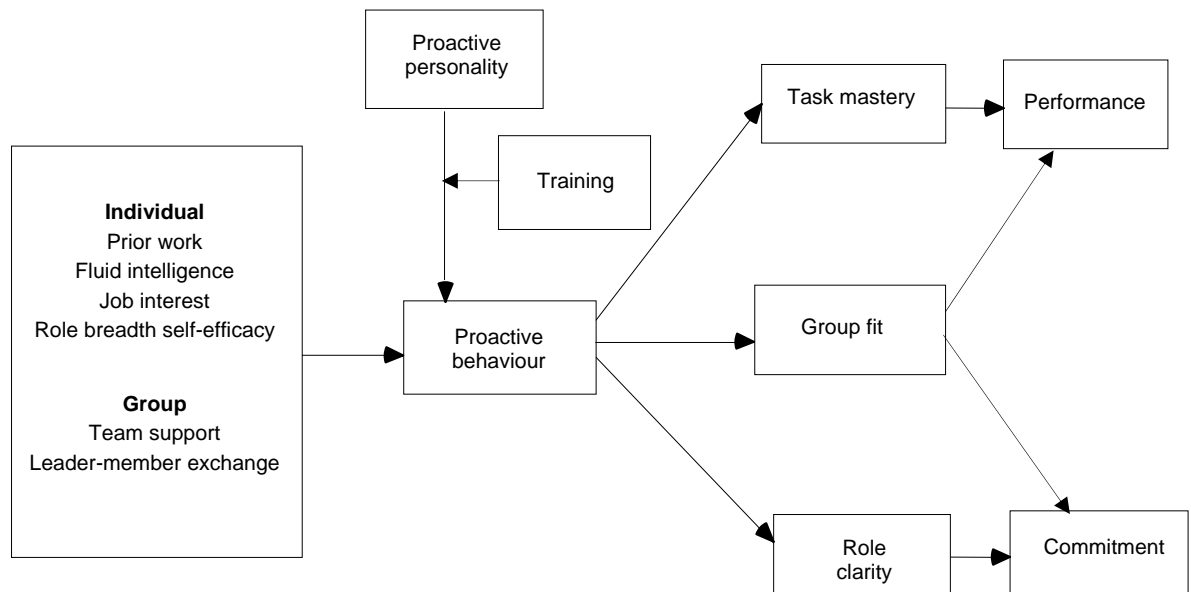
Figure 2. Hypothesised Model B of newcomer proactive socialisation.

In the present study, only those relationships detailed in Model A and Model B are of interest. As part of the model fitting process, however, other relationships between predictor and criterion variables will be tested alongside those paths already specified in each model. In their current format, both theoretical models extend the work of others in the proactive socialisation domain in several ways. Firstly, each model recognises that individual differences as well as environmental factors impact on

newcomer adjustment. Five individual areas of interest are included in both Model A and Model B: (a) prior work experience (Adkins, 1995; Beyer & Hannah, 2002; Feldman, 1981; Riordan et al., 2001), (b) fluid intelligence (Schmidt & Hunter, 1998, 2004), (c) job interest (Lent, Brown, Gover, & Nijjer, 1996; Nauta, Kahn, Angell, & Cantarelli, 2002; Tracey, 2002), (d) proactive personality (Bateman & Crant, 1993), and (e) role breadth self-efficacy (Parker, 1998, 2000, 2007).

Secondly, at an environmental level, both Model A and Model B recognise the role of organisational insiders in the adjustment process, and substantiate the work of Major et al., (1995) and Reichers (1987). Both researchers suggest that it is only when newcomers *and* insiders are actively involved in newcomer adjustment that socialisation will be its most potent. In an effort to extend previous research, Model A and Model B focus explicitly on the role of the more experienced team member and manager in newcomer adjustment. These are the individuals with whom a newcomer will most often negotiate his or her organisational role (Major et al., 1995). They are also more relevant than subordinates or clients in terms of helping newcomers learn about the organisation (Chan & Schmitt, 2000). While both groups shape a range of newcomer behaviours, (Ashford & Black, 1996; Bauer & Green, 1996; Cable & Parsons, 2001; Chen & Klimoski, 2003), their role in supporting newcomer proaction and role breadth self-efficacy is less clear. By specifying both individual and insider predictors, Model A and Model B provide a broader range of potential effects, and underscore the importance of newcomer interaction for successful adjustment.

Thirdly, both Model A and Model B put training at the centre of the socialising experience, and acknowledge the importance of early, job-relevant training in the adjustment of newcomers. Both models extend previous research which hypothesises a training benefit (Gruman et al., 2006; Saks & Ashforth, 1997a), but which neglect testing this effect. In the present study, a longitudinal training design has been adopted, with self and other ratings of proaction taken pre- and post-training.

Fourth and finally, both Model A and Model B replicate the work of others who have already identified a link between important proximal and distal measures of newcomer adjustment (Chan & Schmitt, 2000; Kammeyer-Mueller & Wanberg, 2003; Morrison 1993a, 1993b; Wanberg & Kammeyer-Mueller, 2000). Each model extends

this research by exploring proximal and distal outcomes across individual and group levels of analysis and will do so inside two contrasting organisational environments.

A more comprehensive review of each component of Model A and Model B is presented in the remainder of chapter 3, together with the specific hypotheses that will guide an evaluation of each model.

<center>Part 1: Predictors of Newcomer Adjustment: Individual</center>

Part 1 presents a summary of the research surrounding five individual-level predictors of newcomer adjustment: (a) prior experience, (b) fluid intelligence, (c) job interest, (d) proactive personality, and (e) role breadth self-efficacy. Important links to both role breadth self-efficacy and proactive behaviour are presented in turn, together with each testable hypothesis.

Prior Experience and Role breadth Self-Efficacy

The impact of previous work experience on the socialisation of newcomers is worthy of exploration, since one's adjustment to a new job will be shaped by the behaviours he or she has historically acquired (Jones, 1983). Louis (1980) agrees, suggesting that the process of 'changing from' one organisation has a significant impact on the 'changing to' process. Van Maanen (1984) coined the term 'socialisation chain' to describe the process whereby lessons learned at one time or setting are later tested at another time or place. According to Beyer and Hannah (2002) it is only when we fully understand how experienced newcomers apply and build on past experiences that our understanding of organisational socialisation will be complete.

It is plausible that prior work experience might facilitate the confidence to perform, since expectations of future self-efficacy are directly related to past success (Bandura, 1986) and perceptions of past success (Jones, 1983, 1986). According to Bandura, if an individual has successfully completed a task in the past, he or she could realistically expect to perform that same task or a similar one with equal success in the future. Of relevance here, is the concept of 'enactive mastery', or repeated performance success. According to Gist (1987), "mastery is facilitated when gradual

accomplishments build the skills, coping abilities, and exposure needed for task performance'' (p. 473).

With past experience, an individual will acquire strategies to deal with ambiguity or uncertainty in the future, and thereby influence one's expectations of personal competence (Jones, 1983, 1986). In the event of a transfer or promotion, an experienced newcomer might also be expected to possess a high level of self-efficacy, particularly if past success was one criterion for resocialisation (Jones, 1983). Not all previous experience is expected to have a positive influence on self-efficacy. Adkins (1995) found that past experience inhibited adjustment as a consequence of what she speculated was a 'false confidence' effect, and which induced newcomers to be ''less attentive to formal instructions and organisational cues'' (p. 856). Beyer and Hannah (2002) also found that newcomers with a narrow range of prior work experience were more likely to perceive a greater threat to their sense of self-belief, and question their confidence to effectively take on a new job.

While there are no known studies linking prior work experience to role breadth self-efficacy, it seems reasonable to assume that all aforementioned studies involving generalised self-efficacy have relevance in a more task-specific context. There is also sufficient evidence to suggest that personal self-efficacy should have a positive bearing on success regardless of operating in an individualised or institutionalised workplace. Because an individualised workplace is characterised by ambiguity and the absence of structure, newcomers with the self-belief and confidence to carry out a broader role may be well served to reduce workplace uncertainty. Parker (1998) supports this assumption, having found that individuals did develop an increased sense of control and self-efficacy when given greater task autonomy and decision-making influence. In an institutionalised environment such as the NZ Police, the process of socialisation begins long before a recruit arrives at Police College.

Throughout each stage of the selection process, newcomers acquire a sense of the accepted belief systems, norms, and values of the culture, and are provided with a wealth of materials to support future sensemaking (Louis, 1980). Because of this shared cultural knowledge, newcomers typically enter Police College with a repertoire of raw materials that should facilitate a more confident disposition. Rather than all work

experience contributing equally to newcomer assimilation, it appears that both the quantity of work (i.e., amount) and quality of work (i.e., type and breadth) have a legitimate role to play (Tesluk & Jacobs, 1998). What has been untested is the relative importance of these work conditions in stimulating newcomer proaction. Model A, together with the above discussion supports testing the following hypothesis:

Hypothesis 1:
Both the quality and quantity of prior work experience will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Prior Work Experience and Proactive Behaviour

It is plausible that prior work experience might also have a direct relationship with newcomer proactive behaviour. In a theoretical argument, Maronne and Taylor (2005) suggest that past experience should support newcomer proaction by providing an existing set of behaviours and cognitive schemas that newcomers can apply. Jones (1983) supports this view by suggesting that it is through the development of cognitive schemas that newcomers have the capacity to filter out information from their new environment and make sense of it. More specifically, it is the diversity of work schemas (Beyer & Hannah, 2002) and the complexity of previous job-related schema (Ashford & Taylor, 1990) that should facilitate newcomer adjustment.

Secondly, Marrone and Taylor (2004) argue that prior experience might prompt newcomer proaction by enabling them to exceed performance expectations. Particularly in high-tech firms, experienced newcomers are expected to perform at a satisfactory level in as little as 2- or 3-months on-the-job (Chen & Klimoski, 2003). Organisations with a strong culture of achievement also expect more of new employees (Eden, 1990). In response to these pressures, newcomers might be prompted to seek out information, build new relationships, and take the initiative in order to adjust quickly and perform above expectations (Marrone & Taylor, 2004). If newcomers can quickly demonstrate competence, Feldman (1976) suggests that they will 'earn the right' to make workplace suggestions for change. In turn, they will be given the opportunity to extend themselves with new tasks and skills.

Thirdly, prior work experience might support newcomer proaction as a way of aligning previously acquired expectations with current socialisation experiences (Marrone & Taylor, 2004). For example, on joining a new organisation, a newcomer brings with them a set of expectations about the future relationship (Major et al., 1995), and may experience some degree of surprise if differences exist between their present and prior workplaces (Louis, 1980). Proactive sensemaking is a mechanism by which the newcomer can reconcile these differences (Ashford & Black, 1996), and increase their adjustment to organisational norms and values (Anakwe & Greenhaus, 1999). By behaving more proactively, a newcomer might also lessen the substantial influence prior experience has exerted on them (Louis, 1980).

Following this line of argument, it should follow that people who have successfully acquired a useful complement of skills and abilities through past experience might be promoted to behave proactively in future work scenarios. While Marrone and Taylor (2004) do not test their hypotheses empirically, there is sufficient evidence to suggest that these ideas have substance. It is also plausible that each argument advanced in support of a link between prior work experience and role breadth self-efficacy in both an individualised and institutionalised environment should also contribute to higher levels of proaction in both workplaces as well. Model B, together with the above discussion supports testing the following hypothesis:

Hypothesis 1(a):
Both the quality and quantity of prior work experience will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

Cognitive Ability and Role breadth Self-Efficacy

Ability is a general term concerning one's capacity to act physically, mentally, or in some other way, while cognitive ability refers specifically to mental capacity (Ree, Carretta, & Steindl, 2002). General cognitive ability is thought to link to role breadth self-efficacy since effective performance of a broader role "requires employees who are sufficiently confident in their abilities" (Parker, 1998, p. 835). Gist and Mitchell (1992) agree, suggesting that ability is an essential component of self-efficacy, while Chen, Casper, and Cortina (2001) suggest that cognitive ability should relate to self-efficacy

because individuals with high cognitive ability are more likely to gain positive task-related experiences that lead them to be more efficacious.

Whilst these arguments are plausible, a review of research exploring the link between cognitive ability and self-efficacy is mixed. Phillips and Gully (1997) reported a positive correlation ($r = .29$, $p < .01$) between cognitive ability and self-efficacy for an academic learning task. In contrast, Ford, Quinones, Sego, and Sorra (1992) found a negative correlation ($r = -.08$), and Ford, Smith, Sego, and Quinones (1993) found no correlation (mean $r = .04$). In a more recent meta-analysis of the self-efficacy literature, Judge, Jackson, Shaw, Scott, and Rich (2007) found that the relationship between cognitive ability and self-efficacy was significant ($\beta = .20$, p < .01).

The inconsistency of findings between cognitive ability and self-efficacy suggest that certain variables may moderate this relationship. One potential moderator is task complexity (Schmidt & Hunter, 1998). In an empirical test of this relationship, Chen et al., (2001) found that cognitive ability was a stronger predictor of self-efficacy prior to the completion of less complex tasks ($r = .21$, $p < .05$) rather than high complex tasks ($r = .16$, $p < .05$). In summing up their findings, Chen et al., concluded that individuals high in cognitive ability were more likely to accomplish a task when compared to individuals with low cognitive ability, as well as more accurately judge the difficulty of task accomplishment (i.e., self-efficacy).

A second moderating factor in the relationship between cognitive ability and self-efficacy is the passage of time. According to Mitchell, Hopper, Daniels, George-Falvy, and James (1994), it is during the period of skill acquisition that people will engage in the most comprehensive cognitive processes to estimate self-efficacy. As time progresses and exposure to a task increases, people are expected to use less effortful (i.e., simple and quick) cognitive processes to determine self-efficacy. In an empirical study of this theory, Mitchell et al., found that over seven trials, individuals reported having to think less about each step while working on a task and focus their attention less concertedly. In summary, they concluded that ability (which is a major part of self-efficacy) may be the best predictor initially of performance on a complex task, but less important once a skill becomes well learnt.

There are no known studies which consider the link between cognitive ability and role breadth self-efficacy while taking the organisational context into account. That said, we do know that cognitive ability should be related to role self-efficacy since it reflects a capability that extends across all aspects of work (Morgeson, Delaney-Klinger, & Hemingway, 2005), and by default, all organisational settings. Finally, to fully understand the link between cognitive ability and role breadth self-efficacy, it is important to clarify the distinction between fluid '*gf*' intelligence and crystallised '*gc*' intelligence (Cattell, 1987).

Whereas fluid intelligence involves the innate ability to reason; to see the relationship between ideas and approach new problems, crystallised intelligence is more strongly influenced by prior learning, education, and cultural exposure (Brody, 1992). In a longitudinal study, Lachman and Leff (1989) found that among an elderly sample, individuals with a lower level of fluid intelligence perceived the greatest decline in their self-efficacy and control beliefs. The present study attempts to extend this research, by exploring its generalisability to a sample of work newcomers. In line with Model A and the above discussion, the following hypothesis is proposed:

Hypothesis 2:
Fluid intelligence will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Cognitive Ability and Proactive Behaviour

Prior research confirms a strong relationship between general cognitive ability and important performance outcomes. This includes training success (Driskell, Hogan, Salas, & Hoskin, 1994), and performance for both military (Hunter, 1986) and civilian populations (Pearlman, Schmidt, & Hunter, 1980). While cognitive ability predicts performance in higher level jobs better than it does for lower level jobs, the link between cognitive ability and performance does exist for all job types (Schmidt & Hunter, 1998, 2004). According to Grant and Ashford (2008), job performance is, in large part, a result of proactive information-seeking and learning behaviours. These behaviours in turn, allow some individuals to acquire knowledge more quickly than others.

Frese and Fay (2001) provide further support for the link between cognitive ability and proactive behaviour via their work on personal initiative. In particular, these researchers identify a number of proactive behaviours that impact on initiative-taking, including the ability to (a) deal with future problems, (b) take advantage of opportunities, (c) develop back-up plans, and (d) identify pre-signals that indicate some problem or opportunity in the future. Central to the ability to engage in each of these behaviours is cognitive ability (Schmidt, Hunter, & Outerbridge, 1986).

Over the last decade, another relevant research stream has emerged which also supports the link between cognitive ability and proactive behaviour. More specifically, personality psychologists have begun to converge on the existence of five basic factors of personality (Mount & Barrick, 1998). One of these five dimensions, 'openness to experience' has been linked to cognitive ability (Moutafi, Furnham, & Crump, 2003) and is marked by an inclination towards variety, curiosity, and comfort with change (Moutafi, Furnham, & Paltiel, 2004). In the absence of an open outlook, individuals tend to have more narrow interests, prefer familiarity over novelty, and resist new ways of working. In contrast, open employees are more likely to engage in proactive behaviour since they recognise and embrace a broader array of possibilities for action (Grant & Ashford, 2008).

In testing the link between cognitive ability and proactive behaviour, attention will again focus exclusively on fluid intelligence. According to Moutafi et al., (2003) individuals with lower fluid intelligence are less curious and have narrower interests due to their reduced ability to handle novel experiences. This is anticipated to discourage proactive effort during the socialisation process. In contrast, individuals with higher fluid intelligence should be better equipped to handle novel experiences and stimulate and challenge themselves more readily. With a more curious outlook on life, individuals with an elevated level of fluid intelligence are expected to modify their work environment by engaging in a wide repertoire of proactive behaviours.

There are no known studies which link fluid intelligence and proactive behaviour while taking the organisational context into account. That said, it is plausible that the same argument advanced in support of a link between fluid intelligence and role-breadth self-efficacy should also contribute to increased proaction in both an

institutionalised and individualised workplace. Model B, together with the above discussion, supports testing the following hypothesis:

Hypothesis 2(a):
Fluid intelligence will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

Job Interest and Role breadth Self-Efficacy

In line with Athanasou and Van Esbroeck (2007), the concept of job interest is best thought of as a description of one's choices, likes, and preferences for objects, activities, events, or tasks. Although theoretically distinct concepts, the link between career interests and self-efficacy is one of the most robust findings in vocational psychology (Nauta et al., 2002). More specifically, Nauta et al., found a bidirectional or reciprocal relationship between student career interests and self-efficacy (i.e., self-efficacy predicted changes in interests and vice versa). They also suggest that this link is likely to be the most pronounced when individuals receive regular feedback and have ample opportunity to evaluate the association between their job interest and the effort they expend.

Other studies reinforce the importance of the link between job interest and self-efficacy. For example, Lent et al., (1996) found that when asked, 74% of students listed their interest in a subject area as contributing to their self-perception. Of this sample, 17% listed their interest level as the *primary* basis for their self-efficacy. It would seem that if an individual is interested in an area, then they are likely to spend more time engaged in that activity and fine-tune their competence (Tracey, 2002). In addition, Lent, Larkin, and Brown (1989) suggest that job interest may motivate "further interaction with a task, yielding more opportunity for personal and vicarious success experiences and thus further self-efficacy enhancement" (p. 286).

On the basis of previous research it is clear that job interest and self-efficacy beliefs are both important and affect each other in a bio-directional way. In the present study however, the focus is exclusively on verifying the proposition that job interest among an adult sample will dictate future role breadth self-efficacy. The extent to which this link remains strong inside both an institutionalised and individualised setting

will also be more fully explored. Thus, in line with Model A, the following hypothesis is proposed:

Hypothesis 3:

Job interest will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Job Interest and Proactive Behaviour

Job interest is also anticipated to predict proactive behaviour among NZ Police and graduate newcomers. When interested in the work at hand, an employee should be more proactive since this behaviour might help enhance the work situation (Ohly & Fritz, 2007). Because proactive behaviour is often discretionary, an individual is unlikely to engage in proactive effort if they do not care about the task at hand, nor regard it as worthwhile. When interested in work, an individual is more likely engage in proactive effort in order to retain and improve their environment (Sonnentag, 2003).

Two empirical studies provide mixed results with regards to the relationship between job interest and proactive behaviour. Firstly, Sonnentag (2003) found that the concept of 'work engagement' was positively related to proactive behaviour on a daily basis. Sonnentag quotes work engagement as a "persistent, positive affective motivational state of fulfillment" (p. 518). More recently, Ohly and Fritz (2007) tested the relationship between intrinsic work motivation and proactive behaviour and found disappointing results. Intrinsic work motivation is defined as the "motivation to engage in work primarily for its own sake because work itself is interesting, engaging, or in some way satisfying" (Amabile, Hill, Hennessey, & Tighe, 1994, p. 950).

The present study is expected to verify the link between job interest and future proactive behaviour. In addition, it is expected to contribute to previous research which suggests the benefits derived from proactive behaviour may originate prior to organisational entry, regardless of organisational setting (Kammeyer-Mueller & Wanberg, 2003). In line with Model A, the following hypothesis is proposed:

Hypothesis 3(a):

Job interest will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

Proactive Personality and Role breadth Self-Efficacy

Research has shown that there is a dispositional tendency for some individual's to be more proactive than others, and that as shown in Model A, this disposition is likely to facilitate role breadth self-efficacy. Bateman and Crant (1993) initially introduced the construct of proactive personality to highlight the differences among individuals in the degree to which they took action to influence their environment. It is premised on the observation that individuals are not simply passive recipients of their environment, but are instead, intentionally driven to "make things happen" (Bandura, 2001, p. 1). Conceptually, Bateman and Crant have defined proactive personality as a "relatively stable tendency to effect environmental change" (p. 104), and is "relatively unconstrained by situational forces" (Seibert et al., 1999, p. 417). Whereas proactive individuals actively identify opportunities for change, less proactive individuals tend to passively adapt to the status quo (Bateman & Crant, 1993; Crant, 2000).

In line with this, prior research has shown that proactive personality is related to various adjustment outcomes including team performance (Kirkman & Rosen, 1999), proactive socialisation into organisations (Kammeyer-Mueller & Wanberg, 2003), and learning and development activity (Major, Turner, & Fletcher, 2006). Fay and Frese (2001) argue that the impact of proactive personality on behavioural outcomes is mediated through domain-specific orientations, such as self-efficacy. A number of studies support this link (Brown, Cober, Kane, Levy, & Shalhoop, 2006; Parker, 1998; Parker et al., 2006). More specifically, Parker et al., found that proactive personality was positively related to proactive work behaviour ($r = .26$, $p < .01$) via its relationship with role breadth self-efficacy ($\beta = .49$, $p < .01$).

Taken together, these studies suggest that one's assessment of personal capability might be driven, in part, by the stable characteristics that an individual brings to a situation (i.e., their proactive personality). Prior meta-analyses have shown that regardless of the setting or the methodology used, self-efficacy is a robust and important factor contributing to activity (Stajkovic & Luthans, 1998). In line with this, it is

plausible that in both an institutionalised and individualised workplace the relationship between proactive behaviour and newcomer adjustment is mediated by role breadth self-efficacy. The above discussion, together with Model A, supports the following hypothesis:

Hypothesis 4:
Proactive personality will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Role breadth Self-Efficacy and Proactive Behaviour

In line with Model B, role breadth self-efficacy is expected to be an important predictor of proactive behaviour. In support of this link, Axtell et al., (2000) found that production staff with high levels of role breadth self-efficacy had more autonomy, expressed greater concern for work issues, and had more work-related ideas. Parker et al., (2006) also found that the decision to engage in proactive behaviour was positively linked to role breadth self-efficacy and that this cognitive-motivational state was missing in people who engaged in more passive types of behaviour. Finally, Ohly and Fritz (2007) found that role breadth self-efficacy was the only motivational variable to contribute to team member ratings of proactive behaviour ($r = .27, p < .01$). This study was interesting in that it also included a specific measure of job self-efficacy which was not found to have any relationship to proactive behaviour. On the combined basis of these results, it would appear that employees with high role breadth self-efficacy expect to be successful when they demonstrate proactive behaviour, thereby making this behaviour more likely (Axtell et al., 2000; Parker et al., 2006).

Confirmation of the link between role breadth self-efficacy and proactivity is also evidenced in studies that are aimed at lifting role breadth self-efficacy. In a study where task autonomy and decision-making influence was deliberately increased, Parker (1998) found that employees' developed an increased sense of control over their environment and were afforded sustained opportunities for mastery and modeling experiences. Parker concluded that work redesign could promote role breadth self-efficacy, which in turn would enhance employee proaction. In line with Model B, and the above discussion, the following hypothesis is proposed:

Hypothesis 4(a):

Role breadth self-efficacy will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

<u>Part 2: Predictors of Newcomer Adjustment: Group and Manager</u>

In this section, consideration is given to the group and leader variables that support newcomer proaction during organisational entry. Initial research suggests that while newcomers can proactively support their own adjustment, superior learning will occur when managers *and* team members are actively involved in the process (Major et al., 1995).

<u>Team Support and Role breadth Self-Efficacy</u>

As work groups continue to proliferate, it becomes increasingly important to consider the impact of experienced insiders on newcomer adjustment (Anderson & Thomas, 1996). The importance of the work group in facilitating newcomer functioning and adjustment is well established (Anakwe & Greenhaus; 1999; Feldman, 1981; Kammeyer-Mueller & Wanberg, 2003; Ostroff & Kozlowski, 1992). For many newcomers, the message from team members is particularly salient during the encounter phase of assimilation and in response to surprise and uncertainty (Miller & Jablin, 1991). It would seem that this group is more available to newcomers than any other aid (Louis et al., 1983), do not present any hierarchical relationship (Feij, 1998), and can advise on the credibility of different information sources (Feldman, 1981). The work group may also communicate subtle values and expectations that are not well understood by supervisors or managers (Schein, 1988), but which are essential for performance. Indeed, experienced team members have been shown to have such a powerful effect on fellow employees that their support and help can reduce the negative impact of unmet expectations (Major et al., 1995).

Team-member exchange research also supports the role of the group in facilitating newcomer self-efficacy. For example, newcomers who experience a positive exchange with their peers are more likely to receive role-related information and experience greater feelings of empowerment (Liden, Wayne, & Sparrowe, 2000; Seers, 1989).

Empowerment is a construct that is recognised to include an element of self-efficacy (Conger & Kanungo, 1988). Similarly, Thomas and Velthouse (1990) acknowledge the perceived ability to accomplish work-related tasks (i.e., self-efficacy) as a necessary state for empowerment. According to Liden et al., empowerment perceptions are directly influenced by the individuals with whom one works. In a high-quality team exchange, experienced insiders should provide appropriate feedback and social support as well as nurture self-efficacy. In a test of this theory (Chen & Klimoski, 2003) found that newcomers with positive perceptions of efficacy were more likely to develop good team relationships. This, in turn, contributed to future newcomer effectiveness.

Parker et al., (2006) present another relevant stream of research to support the link between team support and self-efficacy. In a study of proactive behaviour, coworker trust was found to have a positive, albeit weak relationship with role breadth self-efficacy ($r = .16, p < .05$). Parker et al., suggest that if individuals perceive their relationship with team members to be characterised by trust, then they are likely to gain confidence in their own abilities. Support for this proposition is also provided by Clegg, Unsworth, Epitropaki, and Parker (2002) who found that trust in the organisation predicted individual, innovative behaviour.

A final stream of research that highlights the importance of the work group in facilitating self-efficacy is available in the feedback-seeking domain. Prior research confirms that newcomers use monitoring and inquiry of team members to evaluate their level of competence (Ashford & Cummings, 1983). If feedback seeking from one's peers is positive, newcomer self-efficacy should be high. In contrast, team members may weaken newcomer self-efficacy via the delivery of negative performance feedback. Although this proposition was unsupported by structural equation modeling, the bivariate correlation between feedback seeking and self-efficacy was significant and positive, suggesting that the link between feedback seeking and self-efficacy cannot be discounted (Renn & Fedor, 2001).

The present study intends to build on prior research by explicitly linking team support with role breadth self-efficacy inside both an institutionalised and individualised environment. The importance of self-efficacy in directing behaviour regardless of the environment and measurement methodology has already been

confirmed (Stajkovic & Luthans, 1998). In line with Model A, the following hypothesis is therefore proposed:

Hypothesis 5:
Support from more experienced team members will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Team Support and Proactive Behaviour

Model B hypothesises a direct link between team support and proactive behaviour. Support for this proposition is provided by Barge and Schlueter (2004) in their research on the communication messages used by experienced insiders to shape newcomer behaviour. By analysing the content, function, and context of message activity they found that 88% of newcomers received a memorable piece of advice within the first 4-weeks of their employment. While 17% of these messages reinforced organisational norms and expectations, the majority of messages (76%) prompted individuals to stand out in the organisation by (a) developing personal abilities, (b) doing one's best (i.e., taking the initiative), (c) being organised, (d) having fun with work (i.e., being flexible around work delivery, and developing a positive outlook), and (e) by reflecting on work processes. It is clear from this research that the largest proportion of messages delivered to newcomers had an explicit proactive element, and pointed to the importance of individualising one's performance in order to achieve success.

The power of the group over individual behaviour is also evidenced in team-member exchange research. Specifically, Seers (1989) found that individuals who contributed collaboratively towards the team received more social rewards than members who chose to withhold cooperative team effort. It would seem that if newcomers are motivated to fit in, and the work group values proaction, then the prospect of social rewards might be sufficiently compelling grounds for a newcomer to engage in proactive effort.

There is plausible evidence to support the role of experienced members in shaping newcomer proaction. What is less clear, is how the behaviour of experienced insiders in

a more institutionalised versus an individualised environment might support newcomer proaction. In one of the few studies to examine this link, Gruman et al., (2006) found that newcomers were more likely to engage proactively with their environment when they had ready access to more experienced job incumbents to act as role models. This finding would suggest that newcomers institutionalised in a more structured, formal environment are more likely to engage in information and feedback-seeking, networking, and so on. In a theoretical model, Griffin et al., (2000) does not discount the possibility of newcomers socialised in a more individualised environment also acting proactively, particularly if they have access to informal mentor relationships. On the basis of these findings, and together with Model B, the following hypothesis is proposed:

Hypothesis 5(a):

Support from more experienced team members will positively predict proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

Manager Support and Role breadth Self-Efficacy

Together with team members, managers also play a particularly important role in the guidance and dissemination of information to organisational newcomers (Anakwe & Greenhaus, 1999; Louis et al., 1983; Miller & Jablin, 1991; Ostroff & Kozlowski, 1992). Given their intimate knowledge of work roles, managers are well placed to set the standard for achievement (Fogarty, 2000), define the social tone of the work group (Ostroff & Kozlowski, 1992; Reichers, 1987), provide guidance and support (Bauer & Green, 1998; Kammeyer-Mueller & Wanberg, 2003) and act as mentors (Green & Bauer, 1995). Research suggests that managers also influence newcomer proactivity by neutralising the anxiety often faced at organisational entry, thus allowing the newcomer to focus on their role without distraction (Cawyer, Simonds, & Davis, 2002; Reio & Callahan, 2004). Given a manager's status, this person might also influence proaction via his or her ability to reward certain behaviours and communicate a particular set of expectations (Feij, 1998; Manz & Sims, 1981). It is through these actions that managers can influence newcomers to both improve themselves and enact positive change (Marrone & Taylor, 2004).

Leader-member exchange theory is a specific stream of research that has highlighted the influencing role of managers and supervisors on newcomer self-efficacy. The main premise behind this theory is that leaders differentiate among subordinates within the work unit and develop a different type of relationship or 'exchange' with each employee (Liden et al., 1993). Whereas a high-quality exchange is characterised by an elevated level of supervisor-subordinate trust (Liden & Graen, 1980), loyalty, and mutual influence (Dienesch & Liden, 1986), a low-quality exchange is characterised by downward influence, and based primarily on the formal employment contract (Bauer & Green, 1996; Liden et al., 1993).

Support for the link between leader-member exchange and employee self-efficacy is provided by Schyns, Paul, Mohr, and Blank (2005). In particular, they found that the quality of one's leader-exchange was positively related to occupational self-efficacy (as defined by one's self-belief in the capacity to achieve job success). Gomez and Rosen (2001) also found a positive link between leader-member exchange and employee empowerment (a concept they defined as including feelings of competence). In a related study, Chen and Klimoski (2003) found that newcomers who enjoyed a positive exchange with their manager were more likely to receive role-related information, which led to feelings of empowerment. As already discussed, the link between empowerment and self-efficacy is well established (Conger & Kanungo 1988; Thomas & Velthouse, 1990). Parker (1998) also suggests that the more people feel that they are informed, listened to, and encouraged, the more likely they will develop confidence in carrying out a range of proactive, interpersonal, and integrative tasks.

Indirectly, research concerning the phenomenon known as the 'pygmalion effect' also serves to highlight the impact of one's leader-exchange on newcomer self-efficacy. According to Liden et al., (1993) managers form their perceptions of staff within the first 2-weeks of interaction and communicate their expectations to each employee through verbal and non-verbal means. Over time, individuals will internalise these expectations and act in line with them (Chen & Klimoski, 2003). On the one hand, if a manager assumes a newcomer to have a more passive, reactive orientation, they could increase the likelihood of this perception becoming reality by withholding challenging work and limiting the relationship to more contractual or routine matters. Conversely, if a manager expects a newcomer to be effective, they might assign this person work of

high motivating potential, which in turn, should facilitate employee empowerment (Chen & Klimoski, 2003).

Parker (1998) acknowledges a potential link between leader-member exchange and role breadth self-efficacy. Stajkovic and Luthans (1998) also highlight the importance of self-efficacy in directing behaviour, regardless of environmental setting and measurement methodology. In an effort to extend previous research, and in line with Model A, the following hypothesis is proposed:

Hypothesis 6:
Leader-member exchange will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.

Manager Support and Proactive Behaviour

In line with Model B, it is hypothesised that a strong leader-member exchange will support a higher level of newcomer proaction. Support for this proposition is provided by Boies and Howell (2006) in their research on team effectiveness. In particular, they found that 'in-group' members tended to enjoy a positive leader-exchange and thereby received increased support and encouragement, greater responsibility, and more challenging assignments. By creating favourable work conditions for 'in-group' employees, managers are expected to facilitate a workplace in which newcomers can actively engage, seek information, and make improvement. In contrast, by withholding valuable role and organisational information from 'out-group' members, managers are expected to create uncertainty and a reduced level of initiative.

Not all researchers are convinced that a high-quality exchange between manager and newcomer will support proactivity. In an effort to retain the rewards that come with a positive exchange, newcomers may withhold debating issues with their manager, thus inhibit robust decision making (Deluga & Perry, 1994). Frese and Fay (2001) also question the extent to which a manager will support newcomer proaction, given that some behaviours might lead individuals to challenge accepted practices. More recently, Parker et al., (2006) found a small correlation between supportive supervision and proactive work behaviour, yet suggest that this relationship was probably attributable to its inter-correlation with job autonomy. Beyond enhancing employee self-reliance,

Parker et al., suggests that manager behaviours such as those aimed at building a strong leader-member exchange may have little effect. At the same time, it is also equally plausible that a low-quality exchange with 'out-group' members need not necessarily contribute to lower levels of proactiveness. For example, in the absence of information, 'out-group' members might be compelled to exercise initiative to lower personal uncertainty and make sense of their surroundings.

More research is clearly needed to verify the extent to which the quality of one's leader-member exchange impacts on newcomer proactivity. In part, conflicting evidence may be attributed to differing interpretations as to what constitutes a 'quality' level of support. On the one hand, a transactional leader provides a 'quality' exchange in the traditional sense. This person provides clarity around desired outcomes, delivers feedback in line with agreed objectives, but does not encourage achievement beyond current commitments (Dvir, Eden, Avolio, & Shamir, 2002). On the other hand, a more contemporary view of a 'quality' exchange is perhaps best captured by the transformational leader who seeks to inspire, stimulate, and arouse employees to achieve beyond expectations (Marrone & Taylor, 2004). Graen, Novak, and Sommerkamp (1982) gave specific consideration to the behaviours that typify a high-quality exchange, and summarised these as (a) spending time talking about each person's unique concerns, (b) being sensitive to the issues raised by each person, (c) refraining from imposing one's personal perspective on issues discussed, and (d) sharing some personal insights and expectations.

For the purpose of the present study, consideration will be given to the high-quality exchange that includes transformational behaviours, rather than the behaviours encompassed in a more transactional exchange. As already discussed, it is expected that an institutionalised environment will provide a safe environment for newcomers to interact with their manager in line with the high-quality exchange behaviours identified by Graen et al., (1982). This situation is expected to encourage a sense of comfort, thereby making it relatively easy for newcomers to be proactive (Griffin et al., 2000). In an individualised environment, a newcomer is required to be more self-starting and proactive if they are to facilitate their own adjustment (Ashforth et al., 2007). By actively engaging with their environment, a newcomer is expected to garner important information about the task and ultimately facilitate higher levels of performance

(Ashforth et al., 2007). Higher levels of performance in an individualised environment should underpin the development of a strong leader-member exchange, and in turn, enhance subordinates perceptions about having a positive impact on work outcomes (Aryee & Chen, 2006). Model B, together with previous research suggests the following hypothesis:

Hypothesis 6(a):

Leader-member exchange will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.

Part 3: Newcomer Proactive Tactics

Part 3 of the present study provides a detailed review of the specific proactive behaviours identified in Model A and Model B. Specifically, these include (a) information-seeking behaviour, (b) feedback-seeking behaviour, (c) positive framing, (d) relationship building, (e) networking, (f) observation and modeling, and (g) listening. Each of these behaviours were selected on the basis of meeting four criteria: (a) evidence of a link between each tactic and proactive behaviour, (b) the precedence set by previous research as to the importance of each tactic in newcomer adjustment, (c) the extent to which each tactic is objectively measurable, and (d) the extent to which each tactic is trainable. Part 3 of chapter 3 also presents a case for the pattern of proactive behaviour to differ between NZ Police and graduate newcomers.

Information-seeking behaviour.

 Information-seeking refers to the acquisition of job and organisational information (Wanberg & Kammeyer-Mueller, 2000) and has been an important tactic in the study of newcomer proactivity. Information seeking is a conscious, sensemaking strategy used by newcomers to reduce role and organisational uncertainty (Ashford & Black 1996), and thereby support one's mastery of a new environment (Ashford & Taylor, 1990). When presented with inadequate or insufficient information from supervisors and team members, information-seeking behaviour is a valuable aid to a new employee (Miller & Jablin, 1991).

A cursory review of the information-seeking literature reveals the absence of any agreed-upon measure and a tremendous number of angles from which this area of research has been examined. Information-seeking has been explored in terms of information type (i.e., what information is sought), information source (i.e., from whom information is sought), and information strategy (i.e., how information is sought).

In one of the most quoted information-seeking models to date, Miller and Jablin (1991) identify seven different information-seeking strategies. These include direct inquiry, indirect questions, third party, testing limits, disguising conversations, observing, and surveillance. In a qualitative study based on interview data from experienced newcomers, Cooper-Thomas and Anderson (2008) expanded this work by identifying a more comprehensive set of 24 information-seeking strategies. Each strategy was categorised as being passive (i.e., unobtrusive and reliant on resources made available to the newcomer), active (i.e., when the behaviour of the newcomer is observable), or interactive (i.e., when one's actions cause a reciprocal action from someone else).

Of all information-seeking strategies, the most commonly investigated include overt questioning and inquiry, or covert observation and monitoring. These strategies are variously used by newcomers depending on one's uncertainty and level of social cost, as well as individual and environmental factors (Miller & Jablin, 1991). Perceptions of cost have been found to impact on the type of information-seeking behaviour newcomers utilise (Morrison, 1993b) and whom they seek information from (Chan & Schmitt, 2000; Filstad, 2004; Morrison, 1993b; Ostroff & Kozlowski, 1992). Generally speaking, both supervisors and team members are recognised as being particularly important sources of information for the newcomer (Settoon & Adkins, 1997), although researchers have also considered the role of subordinates, other newcomers, family and friends, mentors, and the written word (Ostroff & Kozlowski, 1992; Morrison 1993a, 1993b).

With respect to the type of information newcomers seek, Ostroff and Kozlowski (1992) found that newcomers not only sought task, role, and group information, but also organisational information about the structure, performance, products, and power distribution among organisational members. Morrison (1995) elaborated on this

classification by suggesting that proactive newcomers consciously sought technical (i.e., task), referent (i.e., role), political (i.e., power), organisational (i.e., structure and product), appraisal (i.e., performance), normative (i.e., cultural), and social (i.e., group) information. Newcomers will then vary both their tactics and frequency of information-seeking behaviour depending on the type of information sought and the information source (Chan & Schmitt, 2000).

Information-seeking has been associated with a number of important socialisation outcomes including task mastery (Morrison 1993a; Ostroff & Kozlowski, 1992; Saks & Ashforth, 1997b), role clarity and social integration (Morrison 1993a), reduced anxiety (Saks & Ashforth, 1997b), adjustment (Ostroff & Kozlowski, 1992), organisational commitment (Saks & Ashforth, 1997b), job satisfaction (Morrison, 1993b; Ostroff & Kozlowski, 1992; Saks & Ashforth, 1997b), and performance (Morrison, 1993b). While some mixed results have been found, sufficient evidence exists to suggest that information gathering does have a role to play in newcomer adjustment.

Feedback-seeking behaviour.

Newcomer sensemaking strategies include both information and feedback-seeking (Ashford & Black, 1996; Kim et al., 2005). Feedback-seeking is best dealt with as a separate strategy however, since it is a psychologically different process from other information-gathering tactics (Griffin et al., 2000). For example, while information-seeking refers to newcomers' search for information, feedback-seeking informs about the adequacy of one's information and subsequent behaviour.

Ashford and Cummings (1983) are credited with presenting the seminal research on feedback-seeking behaviour. In it, they suggest two ways in which an individual can take a proactive role in gathering feedback; they can ask for it directly via overt questioning, or they can passively monitor the environment for cues. Feedback-seeking is thought to be particularly important for newcomers (Wanberg & Kammeyer-Mueller, 2000) and those involved in a career change (Callister et al., 1999) since both groups are more likely to violate organisational norms (Ashford & Taylor, 1990). Feedback informs about the correctness and adequacy of one's behaviour (Ashford, 1986), and allows modification as required (Ashford & Black, 1996). It should also support higher

levels of performance by providing insight as to when one's behaviour is off-track (Ashford & Cummings, 1983).

Consistent with information-seeking behaviour, newcomers seek feedback from both managers and team members, with each source offering valuable information and direction to support adjustment. According to Adams (2005), when the intent is to understand 'why' and 'how' to improve, the ideal type of feedback is both specific and critical since this should help focus attention. In line with information-seeking, prior research has clearly identified a role for proactive feedback-seeking as a mechanism for reducing uncertainty and maximising newcomer adjustment.

Positive framing.

Ashford and Black (1996) first introduced the concept of positive framing as a proactive technique that newcomers use to support their adjustment into a new job. It is a cognitive self-management mechanism that new employees use "to alter their understanding of a situation by explicitly controlling the cognitive frame they place on the situation" (Ashford & Black, 1996, p. 202). Ashford and Taylor (1990) also suggest that positive framing might serve to reduce and manage stress, while Taylor and Brown (1988) link positive cognitive framing with enhanced recovery from illness and improved capability for creative and productive work.

In their review of employee proactivity, Kim et al., (2005) showed that institutionalised socialisation led to person-organisation (P-O) fit for employees who framed the entry process positively but was unrelated to P-O fit for individuals who framed their experiences more negatively. In contrast, Waung (1995) found mixed results when newcomers received coaching in two specific forms of positive framing and urged more empirical work to explore the self-regulatory coping tactics of newcomers in more complex, permanent jobs.

Relationship building.

Social assimilation is recognised as an important aspect of the socialisation process. Chao et al., (1994) highlight the importance of a 'people' dimension in newcomer socialisation and the establishment of satisfying work relationships. Ostroff and Kozlowski (1992) identify a 'group' domain and the importance of being included

in a work group. The strength of the group is borne out in both military and police organisations, where the 'esprit de corps' has been found to build group solidarity in ways that no individualised socialisation strategies could (Griffin et al., 2000).

Relationship building is also particularly important to newcomers in today's quickly changing workforce. According to Hall (1996), newcomers need to develop a relational philosophy of work by being more team orientated, collaborative, and willing to learn from others. Some newcomers are more likely than others to build new relationships, (Ashford, 1986; Morrison, 2002) and are more effective at seeking out interaction opportunities (Reichers, 1987).

When employees join an organisation, the work group provides a potentially powerful mechanism to facilitate job and role learning (Morrison, 2002), as well as control the flow of information (Feldman, 1981). It can also serve to alleviate tension (Evan, 1963) and avoid loneliness and social isolation (Nelson & Quick, 1991). Proactive behaviours such as stopping to talk to others at work, initiating social engagements, and participating in formalised social events can all help newcomers acquire appropriate skills and gain a sense of organisational norms and expectations (Morrison, 1993a; Reichers, 1987).

While the benefit of relationship building with experienced organisational insiders is clear, there may also be a downside. Adams (2005) found that employees who were well liked by managers received less corrective feedback than their less-liked peers. Counter to her hypothesis, Adams found that when the relationship with an employee was strong, managers assumed the individual would know when to ask for information, and did not want to hurt the relationship by giving negative feedback. Indirectly of course, this finding also adds weight to the argument that proactive newcomers who have relationships of breath and depth should be more cognisant of what information they are receiving and not receiving, and subsequently take responsibility for 'filling in any gaps'.

Networking.

Research by Morrison (2002) suggests that newcomers not only become socialised via their interaction with insiders but via the development of networks across the organisation. In particular, networks were found to have a particularly potent role to play in the facilitation of job, role, and organisational learning (Morrison, 2002). According to Brass, Galaskiewicz, Greve, and Tsai (2004) a 'network' can be defined in terms of the relationship, or lack of relationship, between individuals, work units, or organisations. Superiors, team members, and formally assigned buddies or mentors can all form part of one's network, together with more junior or administrative staff.

Social network theory distinguishes between two types of network: the instrumental network that provides information on work-role performance, and the expressive network that provides friendship and social support (Ibarra & Andrews, 1993; Oh, Chung, & Labianca, 2004). A newcomer will differentiate between these informational sources, with the friendship network likely to have a greater impact on adjustment and the instrumental network more appropriate for organisational and role learning (Morrison, 2002). Ashford and her colleagues (Ashford, 1986; Ashford & Black, 1996; Ashford & Taylor, 1990) also highlight the role of information in supporting networking activity. On the one hand, reliable, interpersonal contacts beyond the work group can help resolve organisational politics (Ashford & Taylor, 1990). On the other hand, informational networks should lead to a heightened sense of control (Ashford & Black, 1996).

Of course, for some issues it may be better to seek advice outside the work group due to the potential cost of asking immediate team members (Miller & Jablin, 1991). Networking beyond the group can also facilitate access to different resources. According to Brass et al., (2004) and Settoon and Adkins (1997), staff members who are more centrally placed in the organisation have greater access to, and potential control over, relevant resources, such as information, power, and expertise to assist the newcomer.

The size and diversity of one's network has also been linked to organisational knowledge, with large networks shown to predict greater organisational knowledge among newcomers. In contrast, strong and dense networks have been linked to role

mastery and role clarity (Morrison, 2002). A social network that provides a sense of the 'big picture' can also play a persuasive role in newcomers' organisational 'fit', and subsequent role clarity (Morrison, 2002). In summary, past research indicates that networking with organisational members is a powerful way of acquiring knowledge and learning, and goes beyond what is achievable via socialising alone.

Observation and modeling.

In line with social learning theory, observation and modeling behaviour is one of the primary ways in which people learn new behaviours and skills (Bandura, 1986). A portfolio of role models also offers a range of different attitudes and styles for an individual to emulate and develop into their own style (Gibson, 2004). It should also assist them maintain status with others (Filstad, 2004).

It is generally agreed that successful modeling of behaviour depends on the selection of appropriate people to assist in learning new tasks, skills, and norms (Gibson, 2004). A 'successful' model is one who meets organisational expectations in terms of their attitudes and behaviour, and whose behavioural patterns and cognitive skills can be matched to the observer (Weiss, 1978). Since no single person is likely to possess all the qualifications required of an ideal model, Gibson prompts the importance of using multiple role models. Filstad (2004) concurs with this, suggesting that newcomers do not seek a single role model, but instead, select different qualifications from supervisors, team members, and support staff to create their own style and behaviour.

According to Griffin et al., (2000) observation and modeling as a learning tactic is likely to be more effective in an institutionalised environment, since newcomers are explicitly provided with acceptable role and behavioural models. Indeed, in a police environment, the modeling of preferred behaviours by more experienced personnel is the best guarantee of behaviour stability from one generation of police officers to another (Van Maanen, 1978).

Available research suggests that proactive newcomers do use role models, and will interact and observe different traits, attitudes, and behaviours from several role

models to their advantage (Filstad, 2004). It would seem that simply being told relevant information is a less effective learning technique than observation or trial and error.

Listening.

Despite the common sense role that listening might play in everyday life, there is a limited amount of empirical research on this specific behavioural tactic. Among those researchers to study this phenomenon, listening has been found to play an important role in management skill development (Clark, 1999), problem resolution (Rutter, 2003), social relationships (Halone, 2001), leadership (Alvesson & Sveningsson, 2003), and counseling activity (Levitt, 2001). Perhaps the reason for such limited research is that listening is often portrayed as a passive, mundane activity that complements the more visible activity of speech (Jacobs & Coghlan, 2005). It might also get lost because of a concern about performing other activities (Levitt, 2001).

According to Halone (2001), the act of listening can be divided into three macro-level processes: (a) pre-interaction (i.e., the ability to put one's thoughts aside and be open-minded), (b) during interaction (i.e., responding and not interrupting), and (c) post-interaction (i.e., remembering the conversation and acting on it). Halone also divides listening into three micro-level processes: (a) cognitive (i.e., thinking), (b) affective (i.e., feeling), and (c) behavioural (i.e., doing). Both micro and macro-level processes operate in tandem and collectively characterise the construct of listening.

Rather than see silence as the response to speech, listening is acknowledged as the pre-verbal, initial form of answering. By default, listening must be proactive, if one is to correctly decode and retain the message. While there is no known research that explores the role of listening in the context of socialisation, communication scholars do support the importance of listening in both the development and maintenance of relationships. Extending this line of thinking, it would be reasonable to assume that listening has a powerful role to play in newcomer socialisation, particularly when uncertainty and anxiety is present.

In summary, proactive approaches to socialisation emphasise that newcomers do not always passively wait for direction and guidance as they attempt to learn how to become effective organisational members. Instead, they may actively initiate the

socialisation process by engaging in a range of specific proactive behaviours, such as seeking information, asking for feedback, positive framing, relationship building, networking, observation/modeling, and listening.

The Pattern of Proactive Behaviour among Newcomers

In line with previous research, newcomers who are more proactive are expected to fully engage in a wide repertoire of proactive behaviours. What is less clear from previous research is the pattern of proactive behaviour between newcomers socialised in an institutionalised environment, versus a newcomer socialised in a more individualised context. What we do know is that the socialising environment will influence the extent to which a newcomer engages in proactive behaviour (Griffin et al., 2000; Jones, 1986), and that newcomer behaviour is largely the result of one's experiences during the first months of organisational entry (Saks & Ashforth, 2000).

In a more institutionalised setting, the need for newcomers to engage in proactive behaviour should be lessened as a consequence of having ready access to mentoring support and structured learning activities (Gruman et al., 2006). Alternatively, it is equally plausible that by reducing uncertainty and stress, institutional tactics can indirectly facilitate newcomers' development of proactive behaviour (Bravo et al., 2003; Cable & Parsons, 2001; Gruman et al., 2006; Saks & Ashforth, 1997b). In an individualised environment the pattern of newcomer proactivity is expected to be somewhat different. Since this environment generally reflects an absence of structure, a newcomer may actually be encouraged to question, challenge, and innovate in order to reduce role uncertainty and facilitate one's transition (Ashforth & Saks, 1996; Grant & Ashford, 2008; Griffin et al., 2000). On the basis of this research, it would appear that arguments can be advanced to explain why both institutionalised *and* individualised tactics should support proactive behaviour, yet more research is clearly needed to explain the relative importance of proactive behaviour in both environments.

More research is also needed to confirm whether the pattern of proactive behaviour unfolds similarly across time for recent graduates as well as more seasoned newcomers. While preliminary research has confirmed that graduate newcomers do face greater challenges than those transitioning from one job to another (Ashforth, 2001), few studies are yet to explore how the absence, or presence of work experience

might direct proactive behaviour. It seems reasonable to assume however, that the anxieties faced by a graduate newcomer will be the most potent immediately on entering a workplace that is characterised by uncertainty, autonomy, and accountability (Grant & Ashford, 2008). At such times, the need for proactive information gathering and guidance should be heightened. In order to generate the best return for his or her efforts, a graduate newcomer is also likely to engage proactively with their environment at an early point in their tenure. The reliance of newcomers in an individualised setting on their team members is well known (Ostroff & Kozlowski, 1992), but should lessen over time as the social cost of seeking support increases (Miller & Jablin, 1991).

On the other hand, while an institutionalised environment should make it relatively easy to be proactive, the seasoned newcomer may actually be less motivated to engage in proactive effort. This is expected to be the case if they have used their prior experience to move to an organisation where they have a high degree of natural fit (Carr et al., 2006). It is also expected to be the case during recruit tenure at the Police College, during which time, any desire for information, identity, and social support should be addressed by supervisory staff. That is not to say that in an institutionalised environment, the need for proaction is completely removed for a seasoned newcomer (Griffin et al., 2000).

In the present study, police recruits are anticipated to demonstrate a stable pattern of proaction that reflects the need for some self-directed activity, but not as much as required by graduate newcomers. Other researchers have found a relatively stable pattern of association between institutional tactics and adjustment outcomes over time (Ashforth & Saks, 1996). A unique feature of the NZ Police environment is that after 19-weeks of relative security and stability at the Police College, recruits enter the field as probationary constables. At this point, the work environment dramatically changes, and recruits are thrust from "a state of certainty to uncertainty….from the familiar to the unfamiliar" (Van Maanen, 1977, p. 16). This shift is expected to prompt more proactive behaviour among police newcomers. More explicitly, it is expected that a police constable's behaviour will replicate a graduate newcomer entering an individualised workforce for the first time.

Part 4: The Impact of Training on Newcomer Proaction

In Part 3 of chapter 3, an argument is presented for newcomer proaction to differ as a consequence of one's socialising environment. What this research omits to consider is the extent to which newcomers can be assisted to engage more proactively with their environment via the provision of targeted training, and how this situation might also direct one's future proactive efforts.

Training is an important instrument in the socialisation of new employees (Feldman, 1989), and "plays a major role in how individuals make sense of, and adjust to, their new job settings" (Feldman, 1989, p. 399). In the last several years, there has been an increasing move towards the integration of both training and socialisation research streams. This research has emphasised both the availability and helpfulness of various training approaches (Nelson & Quick, 1991), the amount of training (Saks, 1996), the benefits of individual versus group training (Moreland & Myaskovsky, 2000), and the effectiveness of training (Axtell & Parker, 2003; Kirby et al., 2002; Waung, 1995).

Not all training interventions are equally beneficial in facilitating a behavioural change. Research by Parker (1998) showed no evidence that training in a proactive set of work tasks actually increased role breadth self-efficacy. Having said that, she did acknowledge that when the skills taught were narrowly focused and the use of those skills were restricted, any increases in self-efficacy associated with training could be lost. To avoid this issue, NZ Police and graduate newcomers will be trained in seven specific proactive behaviours, namely; seeking information, asking for feedback, positive framing, relationship building, networking, observation/modeling, and listening. Each of these behaviours has application across multiple situations, on an hourly, daily, and weekly basis. If newcomers can be trained to engage more proactively with their environment, then it should also follow that this group should demonstrate a higher overall level of proaction relative to their non-trained counterparts. It should also follow that the benefits accrued by engaging proactively with one's environment should sustain this behaviour longer and any decline in proaction should be more gradual.

The present study intends to substantiate a small but important body of work that shows newcomers can be trained to engage proactively with their environment (Axtell & Parker, 2003; Kirby et al., 2002). More specifically, it is proposed that newcomers who are trained in a range of proactive tactics will replicate the overall pattern of proaction exhibited by their non-trained peers, but it is the *magnitude* of their proactive efforts that will differ. With this in mind, the following two hypotheses are proposed:

Hypothesis 7:

NZ Police newcomers will report a stable pattern of proactive behaviour between T1 and T3 (while at Police College) with those recruits trained in proactive tactics demonstrating the highest overall level of proaction. At T4 (post-college), proactive behaviour will increase to reflect one's role transition, with the greatest level of proaction exhibited by recruits who have received proactive training.

Hypothesis 8:

Graduate newcomers will report their highest level of proactive behaviour at T1 and gradually decline in their level of proaction through to T4. This decline will be of a lesser magnitude for graduates who have participated in pre-T1 proactive training.

Proactive Behaviour that is Observable to Others

Proactive behaviour is change-orientated (Bateman & Crant, 1993; Crant, 2000). As such, newcomers engaging in proactive behaviour can expect to have an effect on themselves and their environment (Grant & Ashford, 2008). Many of these proactive behaviours are observable to others, such as feedback-seeking on an assignment (Ashford & Black, 1996), holding meetings to build coworker relationships (Morrison, 1993a, 2002), or the demonstration of verbal and non-verbal cues to display listening behaviour (Halone, 2001).

The overt demonstration of proactive behaviours is known to come at a cost. In particular, Ashford (1986) suggests that newcomers might be less likely to seek information particularly if it "undermines their standing as confident and self-assured veterans" (Ashford, 1986, p. 487). Information-seeking might also make the seeker appear insecure or incompetent and damage their public image (Morrison, 1993b). Research has also found that the public delivery of feedback inhibits feedback inquiry,

particularly if performance expectations are low (Northcraft & Ashford, 1990). Although the overt demonstration of proactive behaviour is known to entail a cost, not all individuals are expected to change their behaviour (Miller & Jablin, 1991). This is particularly the case if the failure to engage in a specific behaviour will impede job performance (Morrison, 1993b).

On the basis of existing research it is clear that some proactive behaviours are more overt than others and can be objectively observed. What is less clear is the extent to which observer ratings of proactivity concur with newcomer self-reports of proaction. In an effort to extend existing research, two hypotheses are proposed that relate specifically to the overt pattern of proactive behaviour among NZ Police and graduate newcomers. To guide this analysis, consideration will be given to three overt behaviours, namely information-seeking, feedback-seeking, and listening. Each tactic is visible to others and therefore lends itself to measurement. Four tactics that are not visible (or consistently visible) to others will be excluded from this analysis (i.e., positive framing, relationship building, networking, and observation/modeling).

On the basis of a reduced set of proactive tactics, it is anticipated that supervisory staff will still observe a similar pattern of proactive behaviour to that reported by newcomers. Supervisory ratings of proaction are also anticipated to reflect a difference between newcomers who receive proactive training and those who do not. Since police instructors only had the opportunity to observe recruits during their tenure at Police College (i.e., T1 to T3), this was the measurement time period adopted for both the police and graduate groups, thus:

Hypothesis 9:

NZ Police instructors will observe a stable pattern of proactive behaviour between T1 and T3 for all recruits. Instructors will observe the highest level of information-seeking, feedback-seeking, and listening behaviour by recruits who are trained in proactive behaviour when compared to a control, leader-member exchange, and placebo intervention.

Hypothesis 10:

Graduate managers will observe the highest level of proaction from graduate newcomers at T1, and then observe an overall decline in information-seeking, feedback-seeking, and listening behaviour through to T3. Managers will observe the overall decline to be less for newcomers trained in proactive behaviour pre-T1 when compared to a control group who receives no training.

<u>Part 5: Training as a Moderator</u>

On the basis of previous studies, there is sufficient evidence to suggest that training has a differential impact on the effectiveness of newcomer adjustment. The present study intends to advance this work by exploring the extent to which training might also act as a moderator in newcomer adjustment. Baron and Kenny (1986) define a moderator as a "variable that affects the direction and/or strength of the relationship between an independent or predictor variable and a dependent or criterion variable" (p. 1174). In other words, a variable can be considered a moderator if the relationship between two other variables changes as a function of the moderator variable (Saks & Ashforth, 1997a). Baron and Kenny go on to suggest that a moderator can be qualitative (i.e., did/did not receive training) or quantitative (i.e., the amount of training).

In line with Baron and Kenny (1986), Model A hypothesises that role breadth self-efficacy will more readily contribute to future proaction when training is present. The viability of this linkage is confirmed by Axtell and Parker (2003) who conclude that organisational interventions (such as training) can "enhance employees' level of self-efficacy and thereby develop their potential, and ultimately enhance their proactivity" (p. 125). Research by Saks (1995) also showed that access to increased training was associated with multiple post-training outcomes including increased self-efficacy, ability to cope, and job performance, and decreased intention to quit. Interestingly, although training was related to the adjustment of all newcomers, it was of greatest benefit to newcomers with low initial self-efficacy. In line with Model A and the above discussion, the following hypothesis is proposed:

Hypothesis 11:

Training in proactive behaviour will moderate the relationship between role breadth self-efficacy and proactive behaviour. In other words, self-efficacy is expected to predict future proaction when training is present. This relationship will hold for both NZ Police and graduate newcomers.

In line with Model B, a second hypothesis is offered. In particular, it is proposed that if a newcomer has a predisposition towards behaving proactively, then participation in training that is aimed at fostering this tendency should directly influence the future display of proactive behaviour. Axtell and Parker (2003) and Kirby et al., (2002) substantiate this argument by showing how proactive behaviour can be cultivated by training.

In addition to facilitating our understanding of training as a moderator variable, the present study should enhance our understanding of the conditions under which on-the-job training is most potent. In a review of the training literature, Salas and Cannon-Bowers (2001) conclude that while training is a common practice, we need a more holistic understanding of how to build expertise through training. They go onto suggest that in line with the more flexible nature of work, training interventions need to support the development and maintenance of more self-directed (i.e., proactive) learners. In an effort to address the research issues presented by Salas and Cannon-Bowers, and in line with Model B, the following hypothesis is proposed:

Hypothesis 11(a):

Training in proactive behaviour will moderate the relationship between proactive personality and proactive behaviour. In other words, proactive personality is expected to predict proaction when training is present. This relationship will hold for both NZ Police and graduate newcomers.

Part 6: Proactive Behaviour and Socialisation Outcomes

Model A and Model B suggest that newcomer adjustment can be judged by the attainment of two distal outcomes of socialisation: job performance and organisational commitment. Achievement of these outcomes is predicted to be supported via three more immediate goals namely (a) task mastery, (b) group fit, and (c) role clarity. In line with empirical and theoretical research, role breadth self-efficacy and proactive behaviour are expected to uniquely contribute to the prediction of each proximal outcome. Each of these relationships is discussed more fully in the sixth and final section of chapter 4.

Content Areas of Adjustment

Multiple taxonomies of learning have been proposed over the years (Ashford & Black, 1996; Chao et al., 1994; Feldman, 1981; Fisher, 1986; Morrison, 1993a; Wanous 1992). Of all early learning taxonomies, Fisher's is the only one to hypothesise a change to one's identity, self-image, and motivational structure as a result of work-related experiences and role demands. Evidence of identity transformation is particularly apparent in military research with police recruits adopting a more cynical operating style over time (Stradling et al., 1993), and police women exhibiting various levels of assertiveness, dominance, ambition, and competitiveness according to the role they fulfill (Moore, 1999).

In one of the most thorough empirical evaluations of newcomer adjustment, Chao et al., (1994) identified six content areas of learning: (i.e., organisational history, language, politics, people, goals and values, and performance proficiency). While this work was thought to represent a good beginning, the exclusion of any work group dimension and role-learning component meant there were still shortcomings with this taxonomy (Saks & Ashforth, 1997a). Bauer et al., (1998) were particularly critical of this model, highlighting the multi-faceted nature of at least three dimensions (i.e., the history, people, and politics categories). Still other researchers highlight the role of information as a key determinant in newcomer learning and socialisation (Miller & Jablin, 1991; Morrison, 1993a, 1993b; Saks & Ashforth, 1997b). Morrison (2002) consolidated this research and found three types of information were particularly

important indicators of newcomer learning. These revolved around the organisation, job, and role.

It is clear from research to date that considerable progress has been made towards understanding how adjustment arises and several taxonomies of learning have been advanced. In a more over-arching review of the socialisation and learning literature, Kammeyer-Mueller and Wanberg (2003) identified three salient modes of proximal learning from existing frameworks namely, task mastery, role clarity, and group integration. Each of these specific modes of learning are introduced below, before examining the means by which they support more distal outcomes of newcomer adjustment.

Task mastery.

The first dimension, task mastery, refers to the ease and skill with which a newcomer can complete his or her work. Feeling confident about one's knowledge of an organisation's rules and procedures (i.e., developing task competence) is critical to overall role and organisational adjustment (Adkins, 1995). Feldman (1981) goes onto suggest that "no matter how motivated the employee, without enough job skills there is little chance of success" (p. 313). Research by Ostroff and Kozlowski (1992) confirms that within the first 9-months of employment, a focus on task issues is more important to a newcomer than mastery of organisational values or goals. In general, people who believe they will perform well on a task generally do better than those who believe they will fail (Gist & Mitchell, 1992). Beyer and Hannah (2002) also found that newcomer adjustment correlated with higher levels of comfort with work and task responsibilities.

Previous research supports the viability of the link between role breadth self-efficacy and task mastery. Gruman et al., (2006) found self-efficacy was significantly related to task mastery ($r = .53, p < .001$), while in a meta-analysis of 114 studies, Stajkovic and Luthans (1998) found the weighed average correlation between self-efficacy and task performance was .38. Parker (2007) also suggests that with self-belief, staff are more likely to "engage in emergent tasks over and above their established tasks in order to solve problems and pursue improvements in domains beyond their immediate job" (p. 409).

Not all research supports a positive link between self-efficacy and task outcomes. For example, Stone (1994) found that in cognitively complex tasks, and in the absence of performance feedback, individuals tended to over-estimate task performance. Other researchers have found a negative relationship between self-efficacy and task performance when measured over time (Vancouver, Thompson, & Williams, 2001). Unlike the work of Stone and Vancouver et al., the present study will be conducted in a real-world context, rather than in an artificial lab-setting.

Previous research suggests that having the confidence to carry out a broader and more proactive role contributes to important task-related outcomes. The link between self-efficacy and task mastery has also been established in a wide range of environmental contexts (Stajkovic & Luthans, 1998), thereby supporting the following hypothesis:

Hypothesis 12:
Role breadth self-efficacy will positively predict future task mastery for both NZ Police and graduate newcomers.

Previous research also supports the link between proactive behaviour and task mastery. Ostroff and Kozlowski (1992) found that information-seeking was positively related to task mastery, while Morrison (1993a) found that it was the frequency of information-seeking behaviour that predicted task mastery. Proactive initiative-taking in order to add complexity and control over work was also found to encourage better work procedures and higher task mastery (Frese & Fay, 2001). The scope for proactive behaviour inside both an institutionalised (Ashforth et al., 2007; Gruman et al., 2006; Mignerey et al., 1995) and individualised workplace has also been confirmed (Allen & Meyer; 1990). In line with previous research, and together with Model B, the following hypothesis is proposed:

Hypothesis 12(a):
Proactive behaviour will positively predict future task mastery for both NZ Police and graduate newcomers.

Group fit.

The idea that successful socialisation involves adjustment into the work group has been a main theme in the literature (Anderson & Thomas, 1996; Chao et al., 1994; Chen & Klimoski, 2003; Fisher, 1986; Kammeyer-Mueller & Wanberg, 2003; Morrison, 1993a, 2002; Ostroff & Kozlowski, 1992). For socialisation to be effective, research suggests that newcomers need to feel an integral part of the immediate work group and feel included in group activities. Anderson and Thomas (1996) suggest that integration into the work group can be segmented into three distinct stages of anticipation, encounter, and adjustment, and that throughout each phase both newcomer and work group engage in a process of mutual influence.

In an empirical piece, Myers (2005) identified six distinct strategies used by newcomers to influence their acceptance into the group. In particular, she highlights the importance of (a) getting to know team members and others, (b) organisational acculturation, (c) recognition, (d) involvement, (e) job competency, and (f) role negotiation. Myers goes onto suggest that feeling trusted by one's peers, developing effective relationships with them, and being included in their activities are all visible indicators that work group integration has been successful. Bandura (1999) also provides support for a link between self-efficacy and group fit, suggesting that "if people are to work together successfully, then members of a group have to perform their roles with a high sense of efficacy" (p. 227). Indirect support for this link is also provided by Griffin et al., (2007) via a concept they label 'team member proactivity'. They define this concept as reflecting a willingness to engage in self-starting, future-directed behaviour to help the team perform better. The link between self-efficacy and group fit inside both an institutionalised (Gruman et al., 2006) and individualised context (Bray & Brawley, 2002) has also been confirmed. The above discussion, together with Model A, supports testing the following hypothesis:

Hypothesis 13:
Role breadth self-efficacy will positively predict future group fit for both NZ Police and graduate newcomers.

The link between proactive behaviour and group fit also has credibility on the basis of previous research. For example, Morrison (1993a) found that the frequency of information and feedback-seeking behaviour had a positive impact on social integration in a sample of newly recruited staff. Gruman et al., (2006) also found that proactive behaviour was positively related to social integration ($R^2 = .31, p < .001$), while Bauer et al., (2007) found that information-seeking positively correlated with social integration ($r -= .16, p < .05$) in a meta-analysis of 70 unique studies. The link between proactive behaviour and social integration has also been established in a wide range of institutional and individualised environments (Bauer et al., 2007), thereby supporting the legitimacy of the following hypothesis:

Hypothesis 13(a):
Proactive behaviour will positively predict future group fit for both NZ Police and graduate newcomers.

Role clarity.

The third learning dimension to be given prominence by Kammeyer-Mueller and Wanberg (2003) is role clarity, and refers to the level of understanding one has of his or her job expectations and responsibilities. Role clarity is thought to be a particularly important driver for organisational newcomers, since ambiguity and unclear role expectations may make it difficult to accurately determine where to direct one's efforts (Miller & Jablin, 1991). In the absence of role clarity, behaviour is likely to be inefficient, insufficient, or misdirected (Jackson & Schuler, 1985). It is also likely to reduce learning to trial and error (Hamner & Tosi, 1974). In contrast, newcomers who understand the boundaries of their authority and responsibility have higher levels of role clarity (Hsiung & Hsieh, 2003). More recently, Hart and Miller (2005) found that specific messages about what it would take to perform proficiently in the organisation led to reduced levels of role ambiguity (and thereby an increase in role clarity).

Research by Ashford and Taylor (1990) and others (Finkelstein et al., 2003; Miller & Jablin, 1991) has shown that achieving role clarity requires information about the desired behaviours by one's employing organisation. This information is thought to be most effectively acquired via indirect means (e.g., reading information and listening to others) and direct means (e.g., seeking information and feedback), but not via covert

means (e.g., indirect questioning or covert eavesdropping). Experienced organisational members are also expected to play a critical role in lifting role clarity (Anakwe & Greenhaus, 1999).

Previous research supports the link between self-efficacy and role clarity (Gruman et al., 2006). Research by Brown, Ganesan, and Challagalla (2001) reinforces this link, suggesting that self-efficacy may operate jointly with information-seeking to improve role clarity. Specifically, they found that employees with high self-efficacy improved role clarity by more effectively seeking, integrating, and using information than employees with low self-efficacy. In contrast, information-seeking did not improve role clarity for employees with low self-efficacy. In line with Bandura (1986, 1997), individuals with an elevated level of self-efficacy should be relatively free from any cognitive distractions, and therefore better able to clarify role expectations. In contrast, individuals with low self-efficacy are more likely to suffer from negative thoughts and uncertainty about their organisational contribution. The link between self-efficacy and role clarity inside both an institutionalised (Gruman et al., 2006) and individualised context (Brown et al., 2001) has also been confirmed. This research, together with Model A, supports testing the following hypothesis:

Hypothesis 14:
Role breadth self-efficacy will positively predict future role clarity for both NZ Police and graduate newcomers.

Previous research also supports the link between proactive behaviour and role clarity in both an institutionalised and individualised environment (Menguc, Han, & Auh, 2007). In line with Ashford and Taylor (1990), individuals can develop role clarity through indirect proaction (e.g., reading information and listening to team members) and direct proaction (e.g., seeking information and feedback). Morrison (1993a) qualified this finding suggesting that it is the specific seeking of role-related information that contributes to role clarity. More recently, Chan and Schmitt (2000) found a positive relationship between proactivity and role clarity among new doctoral students, while Wanberg and Kammeyer-Mueller (2000) found a link between proactive relationship building and role clarity, but no link between proactive information-seeking

or feedback-seeking and role clarity. In an effort to consolidate previous research, and in line with Model B, the following hypothesis is proposed:

Hypothesis 14(a):

Proactive behaviour will positively predict future role clarity for both NZ Police and graduate newcomers.

Distal Outcomes

Both Model A and Model B suggests that the successful achievement of task mastery, group fit, and role clarity is the mechanism by which newcomers can attain more distal outcomes of socialisation. The specific linkages between proximal and distal outcomes of adjustment are detailed in the next section.

Linking task mastery to performance.

Numerous studies have shown empirical support for the link between task mastery and performance. Fisher (1986) suggests that "learning to perform the required work task is obviously a critical part of socialisation" (p. 107), while Campbell, McCloy, Oppler, and Sager (1993) claim "performance is what the organisation hires one to do, and do well". In a model of performance proposed by Campbell (1990), five of the eight factors identified refer specifically to elements of task performance: (a) job-specific task mastery, (b) non-job-specific task mastery, (c) written and oral communication proficiency, (d) supervision - in the case of a leadership position, and (e) management/administration.

Ostroff and Kozlowski (1992) found that the process of acquiring task mastery provided a newcomer with important skill and interpersonal information necessary for optimal performance. In their research with doctoral students, Bauer and Green (1994) found that participation in a variety of work-related activities ultimately led to increased performance as evidenced by the greater number of research submissions and publications made from students. More recently, Chen and Klimoski (2003) suggest that newcomer expectations of performance can be boosted by exposing them to early task mastery. It is the confidence that comes from successfully completing a task that will prompt a newcomer to exert extra effort towards the task, and thereby ensure on-going performance success. In a meta-analysis of the person-job fit domain, Kristof-

Brown, Zimmerman, and Johnson, (2005) found a correlation of .20 between job proficiency and overall performance, thereby providing further support for a link between task mastery and performance

Traditionally, an individualised environment has been thought to stimulate a superior level of performance by reducing constraints on achievement (Ashforth & Saks, 1996) and maximising work motivation (Feldman, 1981). More recently, the investiture tactic has been found to relate significantly with job performance inside an institutionalised environment (Saks et al., 2007). It would therefore seem that the extent to which a socialising tactic contributes to high or low performance depends on what is learnt not on how it is taught (Ashforth & Saks, 1996). With this in mind, it should follow that newcomers who feel their work has meaning should exert more effort toward the task at hand. In turn, they should also experience higher levels of performance success, regardless of the socialising tactics utilised by their employing organisation. In line with Model A and Model B, the following hypothesis is proposed:

Hypothesis 15:
Task mastery will positively predict future performance for both NZ Police and graduate newcomers.

Linking role clarity to organisational commitment.
Role clarity has been positively linked to organisational commitment in multiple studies of newcomer adjustment (Adkins, 1995; Kammeyer-Mueller & Wanberg, 2003; Ostroff & Kozlowski, 1992). Although various conceptualisations of the commitment construct exist, it is the attitudinal or affective component of commitment that has received the most attention. Attitudinal commitment refers to an individual's emotional attachment to an organisation, acceptance of organisational goals and beliefs, and a willingness to exert effort on behalf of the organisation (Mowday, Porter, & Steers, 1982). Individuals with a high level of attitudinal commitment remain with an organisation because they want to (Meyer & Allen, 1997).

Meta-analytic research by Jackson and Schuler (1985) has shown that when role ambiguity is high, organisational commitment is reduced. Kammeyer-Mueller and Wanberg (2003) concur, suggesting that employees need to have a clear sense of their

job in order to feel more positive towards the organisation as a whole. Employees who feel committed to an organisation will be concerned about succeeding more so than employees who do not want to stay. In turn, this may encourage greater effort to learn about others' expectations, thereby reducing role ambiguity still further (Jackson & Schuler, 1985).

Previous research does not discount the socialising efforts of one's employing organisation in facilitating the link between role clarity and commitment. Repeatedly, researchers have found that if an organisation wants loyal and emotionally committed employees then they should employ tactics which increase role clarity (Adkins, 1995; Allen, 2006; Ashforth & Saks, 1996; Jones, 1986; Mignerey et al., 1995; Van Maanen & Schein, 1979). In an institutionalised environment, a newcomer will become embedded into the organisation by numerous insider and organisational forces that collectively serve to reduce uncertainty. The more embedded a newcomer is, the less likely they are to voluntarily leave (Allen, 2006). Indeed in a police context, Van Maanen (1975) found that commitment was engendered prior to entry. Specifically, he found that "the protracted screening associated with police work…assures that those who join the occupation will have strong positive attitudes concerning the new job" (p. 221).

In contrast, the ambiguity of an individualised environment is thought to lessen employee connectedness with an organisation (Ardts et al., 2001). That said, graduate newcomers are known to thrive flexibility and change (Gursoy et al., 2008) more so than previous generations. They are also known to crave a sense of freedom from tight control and hate micro-management (Martin, 2005, as cited in Broadbridge et al., 2007). If graduate newcomers perceive uncertainty and ambiguity as an opportunity to achieve role clarity in their own way and at their own pace, it should produce a sense of freedom and flexibility rather than dissatisfaction and a desire to leave the organisation.

As a group, Gen Ys are also known to be driven by career success, professional development, and promotion (Eisner, 2005). In the absence of clear role expectations, a graduate may therefore be prevented from directing their energies towards goal achievement and feel as sense of confusion and burnout (Singh, 2000). On the basis of these findings, it would seem that graduate newcomers should appreciate role clarity,

but may enjoy the flexibility to achieve it in their own way. It is therefore anticipated that an individualised workplace will provide sufficient certainty for graduates around the sorts of behaviours required for job success, while still giving them the flexibility to access information and support from others when it is needed. In line with Model A and Model B, the following hypothesis is proposed:

Hypothesis 16:

Role clarity will positively predict future organisational commitment for both NZ Police and graduate newcomers.

Linking group fit to performance and organisational commitment.

Numerous studies have provided empirical support that reinforces the importance of group fit in predicting newcomer performance and organisational commitment. More specifically, feeling socially accepted by one's peers should facilitate the development of important insider relationships. These relationships should garner an important sense of job competence (Bauer & Green, 1994) and allow an individual to identify more strongly with the organisation (Reichers, 1987). A strong friendship network (Morrison, 2002) and group integration (Kammeyer-Mueller & Wanberg, 2003) have been found to facilitate a greater desire to fit into the organisation as a whole.

Social integration should influence a newcomer's performance in two important ways. First, it should increase the perception that work can significantly influence organisational goals and outcomes. This in turn should make work seem more meaningful, thereby enhancing the effort a newcomer applies and performance (Fulford & Enz, 1995). Secondly, social integration provides access to cohesive networks with others (Morrison, 2002) and access to important strategic information and resources. Newcomers are anticipated to cooperate more fully with other members of their social network, such that knowledge sharing should facilitate the achievement of task and performance goals (Menguc et al., 2007). In a recent meta-analysis of 70 unique samples, Bauer et al., (2007) substantiated these empirical connections, having found that group acceptance had a weighted average correlation of .21 with job performance and .35 with organisational commitment.

Bauer et al., (2007) also found that social acceptance was more strongly related to job performance for individuals transitioning from school to work, when compared to individuals transitioning into a new organisation. While they offer no explanation for this finding, it is plausible that the drastic challenges facing a graduate employee may prompt a more concerted effort to develop the necessary social interactions to support one's learning. While they can work alone, Gen Y are also more accustomed to team playing than previous generations, and are expected to work well in a collaborative, inclusive organisation (Eisner, 2005; Gursoy et al., 2008). Against this backdrop, graduate employees in an individualised environment are expected to seek out, develop, and nurture their own relationships when, and if, required. In turn, this should enhance organisational commitment (Fulford & Enz, 1995).

Griffin et al., (2000) does not discount the importance of social integration in stimulating performance and commitment inside an institutional environment. On the one hand, insiders provide a common message about the organisation, roles, and appropriate behaviour. In turn, this common message should facilitate a greater sense of shared values (Cable & Parsons, 2001) and reduce the likelihood of voluntary leaving (Allen, 2006). On the other hand, greater access to experienced role models should help facilitate the correct delivery of tasks, and thereby aid performance inside an institutionalised workplace. In a meta-analysis of 30 research studies, Saks et al., (2007) indeed showed that institutionalised socialisation was positively related to newcomer performance. In particular, access to social support that helped confirm one's identity in the organisation was the single best predictor of performance. In line with Model A and Model B, the following hypothesis is offered:

Hypothesis 17:
Group fit will positively predict future performance and organisational commitment for both NZ Police and graduate newcomers.

Summary

Each theoretical model of socialisation presented in Figure 1 (Model A) and Figure 2 (Model B) was tested using two groups of organisational newcomers, from both an institutionalised and individualised workplace. The specific methodology used to test each model is presented in chapter 4.

Table 2

Overview of Model A and Model B Hypotheses

	Hypothesis
1	Both the quality and quantity of prior work experience will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
1(a)	Both the quality and quantity of prior work experience will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
2	Fluid intelligence will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
2(a)	Fluid intelligence will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
3	Job interest will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
3(a)	Job interest will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
4	Proactive personality will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
4(a)	Role breadth self-efficacy will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
5	Support from more experienced team members will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
5(a)	Support from more experienced team members will positively predict proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
6	Leader-member exchange will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.
6(a)	Leader-member exchange will positively predict future proactive behaviour. This relationship will hold for both NZ Police and graduate newcomers.
7	NZ Police newcomers will report a stable pattern of proactive behaviour between T1 and T3 (while at Police College) with those recruits trained in proactive tactics demonstrating the highest overall level of proaction. At T4 (post-college), proactive behaviour will increase to reflect one's role transition, with the greatest level of proaction exhibited by recruits who have received proactive training.
8	Graduate newcomers will report their highest level of proactive behaviour at T1 and gradually decline in their level of proaction through to T4. This decline will be of a lesser magnitude for graduates who have participated in pre-T1 proactive training.
9	NZ Police instructors will observe a stable pattern of proactive behaviour between T1 and T3 for all recruits. Instructors will observe the highest level of information-seeking, feedback-seeking, and listening behaviour by recruits who are trained in proactive behaviour when compared to a control, leader-member exchange, and placebo intervention.

10	Graduate managers will observe the highest level of proaction from graduate newcomers at T1, and then observe an overall decline in information-seeking, feedback-seeking, and listening behaviour through to T3. Managers will observe the overall decline to be less for newcomers trained in proactive behaviour pre-T1 when compared to a control group who receives no training.
11	Training in proactive behaviour will moderate the relationship between role breadth self-efficacy and proactive behaviour. In other words, self-efficacy is expected to predict future proaction when training is present. This relationship will hold for both NZ Police and graduate newcomers.
11(a)	Training in proactive behaviour will moderate the relationship between proactive personality and proactive behaviour. In other words, proactive personality is expected to predict proaction when training is present. This relationship will hold for both NZ Police and graduate newcomers.
12	Role breadth self-efficacy will positively predict future task mastery for both NZ Police and graduate newcomers.
12(a)	Proactive behaviour will positively predict future task mastery for both NZ Police and graduate newcomers.
13	Role breadth self-efficacy will positively predict future group fit for both NZ Police and graduate newcomers.
13(a)	Proactive behaviour will positively predict future group fit for both NZ Police and graduate newcomers.
14	Role breadth self-efficacy will positively predict future role clarity for both NZ Police and graduate newcomers.
14(a)	Proactive behaviour will positively predict future role clarity for both NZ Police and graduate newcomers.
15	Task mastery will positively predict future performance for both NZ Police and graduate newcomers.
16	Role clarity will positively predict future organisational commitment for both NZ Police and graduate newcomers.
17	Group fit will positively predict future performance and organisational commitment for both NZ Police and graduate newcomers.

CHAPTER 4
METHOD

The model and hypotheses presented in chapter 3 were tested as part of a longitudinal study of proactive socialisation using a sample of NZ Police recruits and graduate newcomers. In chapter 4, a description of the sample, questionnaire measures, and the procedure for gathering data inside both groups is presented.

Ethical approval was obtained from the Victoria University Human Ethics Committee for both Study 1 (with NZ Police) and Study 2 (with university graduates). A separate ethics submission and approval was also sought from the NZ Police.

Research Methodology

A quantitative methodology was adopted for the present study since the overall purpose of this work was to confirm, or disconfirm multiple hypotheses that leant themselves to numeric measurement. In line with quantitative research guidelines (Leedy, 1997), each hypothesis was defined prior to data gathering and remained static throughout the measurement process. A quantitative approach was also appropriate since the present study involved a relatively large sample size that was geographically dispersed. Creswell (1994) defines quantitative study as "an inquiry into a social or human problem based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory hold true" (p. 2).

In order to test the generalisability of research hypotheses, data was collected from two contrasting groups: the NZ Police and graduate newcomers. Structured questionnaires were utilised as the primary mode of data gathering since these could be converted into numerical values to support the confirmation or disconfirmation of each hypothesis under review.

Host Organisation 1 – The NZ Police

<u>Introducing the NZ Police</u>

Currently, the NZ Police employs over 10,300 staff; of which 75% are police officers and 25% are non-sworn (i.e., civilian) support. Nationally, the NZ Police is organised into 12 districts, which report into Police National Headquarters in Wellington. In 2006, the NZ government announced it intentions to fund 1,000 additional sworn police officers by 2010. By the 2006 financial year-end, a total of 626 new sworn staff had graduated from the NZ Police College, including 96 individuals recruited directly from overseas. Since 2005, the number of sworn police offices has increased 3%, with an additional 235 sworn officers joining the service in the 2005-2006 year alone (NZ Police Annual Report, 2006).

While police bodies all over the world have traditionally been male dominated, this perception is rapidly changing in New Zealand. Currently, 16% of sworn officers are female, and it is projected that by 2009, a third of sworn staff will be female. The NZ Police is also committed to increasing the number of Māori as well as other ethnic groups into the service. At June 2006, 11% of sworn staff identified themselves as Māori, 4% Pacific persons, 1% Asian, and 15% of European descent (NZ Police Annual Report, 2006).

To become a police officer in New Zealand, an individual must be over 18 years of age upon graduation from the Police College. Individuals who are interested in joining the service are initially invited to attend a public seminar and fill out an application and registration form. Prior to final acceptance into the Police College, an individual must satisfactorily complete a personality profile and range of cognitive ability exercises (i.e., verbal, numerical, and abstract reasoning), a physical appraisal test (PAT), and physical competency test (PCT). A formal interview, background check, medical examination, fingerprinting, and 40 hours practical work experience also form part of the NZ Police selection process.

Once an applicant has been accepted as a police recruit, they must satisfactorily complete 19-weeks of study at the NZ Police College. This course is structured to provide recruits with practical, hands-on policing skills (e.g., handling firearms,

defensive tactics, driving) as well as operational skills (e.g., computer training, writing, case files). Also covered in the course is NZ Police legislation and police procedures. All recruits complete the 19-week course collectively and as part of an intake of 80 to 100 recruits.

Each intake is called a 'wing', with each wing spaced approximately 6- to 8-weeks apart. Each wing is divided into four to six 'sections' with approximately equal numbers in each section. Recruits live in shared accommodation and complete all training collectively with other members of their section. The training itself is conducted by senior police instructors who are expert in each aspect of police training. Each wing section is also assigned a dedicated police instructor who fulfills a mentoring and support role to each recruit during their time at college. Upon graduation, a recruit will assume probationary status for a further 2 years.

Participants

Table 3 provides a summary of demographics for NZ Police participants who were drawn from five consecutive recruit intakes (i.e., Wing 227 to Wing 231). This group made up approximately 75% of the total research pool.

Informed participant support.

Time was set aside prior to study commencement to provide recruits with an overview of the proposed research and to encourage their participation. Consent for participation was sought and recruits were given the option to decline participation, although none did so. Each questionnaire was administered by me, in a face-to-face setting at the Police College.

Table 3

NZ Police Sample Demographics

		Frequency	**Percent**
Wing	Wing 226 (Pilot)	(74)	
	Wing 227 (Proactive training)	79	20.0
	Wing 228 (Proactive training)	40	10.2
	Wing 229 (Leader-member exchange)	80	20.3
	Wing 230 (Placebo)	99	25.1
	Wing 231 (Control)	96	24.4
	Total	**394**	**100.0**
Age	20 or under	34	8.6
	21 to 30	234	59.4
	31 to 40	118	29.9
	41 to 50	8	2.0
	Total	**394**	**100.0**
Ethnicity	Māori	56	14.2
	New Zealand European	281	71.3
	Pacific persons	16	4.1
	Asian	11	2.8
	Australian	4	1.0
	UK/European	16	4.1
	Other	10	2.5
	Total	**394**	**100.0**
Gender	Male	302	76.1
	Female	92	23.4
	Total	**394**	**100.0**
Number of jobs[a]	No prior jobs	1	.3
	1 job	94	23.9
	2 jobs	112	28.4
	3 jobs	96	24.4
	4 jobs	34	8.6
	5 or more jobs	57	14.5
	Total	**394**	**100.0**

Note. [a]Included all full-time or part time jobs, not temporary or student holiday jobs

Data Gathering

Questionnaire design.

During April 2005 and June 2005, questionnaire items were piloted with one wing intake of 74 police recruits, as well as key members of the Police College. This included the involvement of one police psychologist and four teaching police instructors. Specific attention was given to incorporating the unique language of the police culture, and the inclusion of items that meaningfully reflected the experiences of new police recruits. Some small amendments were made to questionnaire items post pilot and are discussed below in the context of each measure.

Questionnaire delivery.

A five-time questionnaire design was adopted for the present study so as to ensure the most thorough conceptualisation of newcomer adjustment. Separating recruit questionnaires by a 6-week interval also had a practical benefit since it enabled questionnaire delivery to be scheduled alongside three curriculum-based assessments which were also administered on a 6-weekly cycle. In this way it was possible to (a) remove a timetabling burden, and (b) maximise the response rate by allowing recruits to complete each questionnaire during 'work' time.

The first questionnaire (T1) was administered 6-weeks post-appointment into the NZ Police College. A second questionnaire (T2) was administered 12-weeks (3-months) post-appointment, and a third questionnaire (T3) was administered at 18-weeks (4.5-months) post-appointment. A T4 measure was administered at 24-weeks (which represented 6-weeks into field duties, but 6-months post-appointment), and a final questionnaire (T5) was administered 10-months into field duties, or 15-months post-appointment.

From a theoretical perspective, prior research suggests that socialisation tactics have the most significant impact in the early months of newcomer tenure and will lessen over time (Ashforth & Saks, 1996). Indeed, newcomer adjustment has been found in as little as 3-weeks (Bauer & Green, 1994) and 8-weeks (Cooper-Thomas & Anderson, 2002). Introducing the first measure at 6-weeks fell within these two parameters, and

reflected the speed with which adjustment was expected to unfold in a para-military environment (Cooper-Thomas & Anderson, 2002).

In addition to occurring rapidly, newcomer adjustment appears to be relatively stable for at least the first 6-months on the job. In particular, Morrison (1993a) found modest shifts in the role clarity and social integration of newcomers between 2-weeks and 6-months tenure. Beyond 6-months however, it is not clear if the effects of socialisation tactics persist, or if, and when, newcomers' responses to a particular tactic will change. This uncertainty highlighted the importance of adopting a research timeframe that extended beyond 6-months. On the advice of NZ Police instructors, the final research questionnaire was administered at 15-months post-appointment. By this stage, police constables were expected to have acquired a solid grasp of policing fundamentals and to be recognised as 'insiders'.

<div align="center">Research Measures</div>

Detailed below is a summary of all research measures, grouped according to the time period in which they were first introduced. A full summary of all research measures is provided in Appendix A.

Pre-Study Measure

Fluid intelligence.

Fluid intelligence was assessed prior to selection into the NZ Police College using the General Reasoning Test Battery (GRT2) developed by Psytech International (Budd, 1993). This is the cognitive ability test of choice for the NZ Police and is used to support all police recruit selection. The GRT2 provides three measures of ability: numerical (NR), verbal (VR), and abstract (AR) reasoning. Of particular interest was the 25-item abstract measure which assesses one's ability to understand abstract, logical problems, and use new information outside the range of previous experience. Abstract reasoning tests are thought to assess the purest form of fluid intelligence, given that they are the least affected by educational experience (Budd, 1993). As discussed in chapter 3, fluid intelligence was also anticipated to link to self-starting, proactive behaviour, as well as facilitate the self-efficacy to perform a broader, more proactive role.

The Cronbach's alpha for the GRT2 AR scale was .83, suggesting that this measure had an acceptable level of internal consistency. The GRT2 AR scale also correlated .56 with the Alice Heim 'perceptual' scale, indicating a satisfactory level of construct validity. Gender differences have not been found for the GRT2 (Budd, 1993), nor has this test been found to discriminate against ethnic minority groups in New Zealand (Hattie, 2007).

T1 Measures (6-weeks)

Demographic indicators.

Several demographic indicators were sought from NZ Police recruits in the present study. Pilot testing revealed this group to be a particularly skeptical and cynical cohort, such that many recruits chose not to supply their unique police identification code (known as a QID number) on study questionnaires. On these grounds, multiple, alternative demographic indicators (i.e., age, ethnicity, gender) were used so as to track recruits in the event QID identification was not known. Each questionnaire sought the same indicators, and in the event conflicting information was recorded, the most frequently occurring demographic markers were used.

Prior work experience.

Prior research shows that past work experiences influence newcomers' subsequent work attitudes and behaviour (Beyer & Hannah, 2002; Jones, 1983; Louis, 1980). Hence, performing similar tasks to those performed in a previous organisation should facilitate one's understanding of the work environment (Anakwe & Greenhaus, 1999). Three items were created to support the measurement of prior work experience in the present study, and were drawn from the theoretical research of Marrone and Taylor (2004). The first item, "At least one of my previous jobs used skills which are similar to those required by a police officer" was intended to measure newcomer skills; the second item "At least one of my previous jobs gave me an insight into the work of a police officer" was intended to measure newcomer expectations, while the third item "At least one of my previous jobs prepared me well for life in the police force" provided a measure of newcomer confidence. Item responding was measured at T1 only, and on a 5-point scale using anchors ranging from 1 (*strongly disagree)* to 5 (*strongly agree)*. Corrected item-to-total correlations for this measure ranged from .56 to .59, and it demonstrated a satisfactory Cronbach's alpha ($\alpha = .75$).

Number of jobs.

As a supplement to the prior work experience measure, police recruits were also asked to indicate the specific number of jobs they had previously held. This was assessed with one item, "How many jobs have you held in the last 5 years?" In line with Wanberg and Kammeyer-Mueller (2000) the last 5 years was chosen as a suitable reporting period since I wanted to capture recent work experience. Whereas an individual may have held several jobs 15 years ago, they are unlikely to remember the experience of adjusting into a new job as readily as someone who had switched jobs more recently. Assessed once at T1, the number of jobs item had six response options, ranging from 1 (*no prior jobs)* to 6 *(5 or more jobs).*

Job interest.

Athanasou and Van Esbroeck (2007) define the concept of 'job interest' as a description of one's choices, likes, and preferences for objects, activities, events, or tasks. Three items were created to support the measurement of job interest in the present study. The first item, "I have had a long-term interest in the work carried out by police officers" was intended to measure the time component attached to vocational interest. The second item, "The job of a police officer has appeal to me" was intended to measure the individualised nature of one's interest, while the third item, "I look forward to acquiring the skills and knowledge to become a police officer" was intended to measure the future-focused nature of one's interest. Item responding was measured at T1 only, and on a 5-point scale using anchors ranging from 1 (*strongly disagree)* to 5 *(strongly agree).* Corrected item-to-total correlations for this measure ranged from .48 to .63, and it had a satisfactory Cronbach's alpha ($\alpha = .74$).

Proactive personality.

A printing error meant that proactive personality was assessed in the present study using only 9 of the 10-item proactive personality measure proposed by Seibert et al., (1999). The missing item was "I love being a champion for my ideas, even against other's opposition". Despite the omission of this item, the 9-item measure still retained an acceptable Cronbach's alpha ($\alpha = .76$) when compared to the 10-item measure ($\alpha = .86$). In line with Bateman and Crant (1993), this scale was designed to assess an

individual's propensity for proactive behaviour by focusing on one's desire for positive change, self-improvement, initiative, and persistence.

Some modification was undertaken to enhance grammatical content and item conciseness. For example, "No matter what the odds, if I believe in something I will make it happen" was shortened to "If I believe in something I will make it happen". The item "Nothing is more exciting than seeing my ideas turn into reality" was shortened to "It is exciting to see my ideas turn into reality". Item responding was on a 5-point scale using anchors ranging from 1 *(strongly disagree)* to 5 *(strongly agree),* and was measured once at T1. Corrected item-to-total correlations for this revised measure ranged from .36 to .55, and it had a satisfactory Cronbach's alpha ($\alpha = .76$).

Team support.

Three items were modified from the socialisation tactics scale developed by Jones (1986) to measure team support. In particular, items were drawn from the serial versus disjunctive sub-scale and focused on the level of support newcomers received from more experienced insiders. Item piloting with recruits confirmed that positively worded items were more comprehensible. To avoid any misunderstandings, each negatively worded item was therefore rewritten into a positive tone. The three selected items were, "I receive guidance from more experienced colleagues as to how I should perform my job", "I have support from people who have previously performed my job" and "Experienced organisational members see advising or training newcomers as one of their main job responsibilities at the Police College". Item responding was on a 5-point scale using anchors ranging from 1 *(strongly disagree)* to 5 *(strongly agree),* and was measured once at T1. Corrected item-to-total correlations for this measure ranged from .77 to .85, and it had an excellent Cronbach's alpha ($\alpha = .90$).

Proactive behaviour.

Four proactive behavioural items were adapted from Ashford and Black's (1996) proactive socialisation scale to measure information-seeking, feedback-seeking (from both one's manager and peers), and relationship building. Where appropriate, items were modified so as to increase their appropriateness with a police sample. For example, the question "[To what extent have you] participated in social office events to

meet people (e.g., parties, softball team, outings, clubs, lunches)?" was changed to "[To what extent have you] mixed socially with other recruits?" The item "[To what extent have you] sought out feedback on your performance during assignments?" was reworded to "[To what extent have you] asked your section instructor for feedback on an issue of importance to you?" and "[To what extent have you] asked another recruit for feedback on an issue of importance to you?"

Four additional items were developed to support other proactive behaviours under review in the present study. The first item "[To what extent have you] let people know you were listening to them by doing such things as holding eye contact, not fidgeting, and nodding?" was developed as a measure of listening behaviour. Levitt (2001) offers support for this item on the grounds that active listening includes the demonstration of specific, non-verbal behaviours. The second item, "[To what extent have you] consciously paid attention to how others behaved at college in order to learn what was right and wrong?" focused on the role of observation in obtaining job relevant information (Miller & Jablin, 1991). The third item "[To what extent have you] replaced any negative thoughts with more positive alternatives?" was intended to measure positive framing, and was in line with Ashford and Black's (1996) conceptualisation of the concept. Finally, the fourth item "[To what extent have you] buddied up with other recruits in your section to help with your own learning?" was developed to measure networking activity. The importance of networking activity in newcomer adjustment already has support (Fisher, 1986; Griffin et al., 2000; Morrison, 2002).

In the Ashford and Black (1996) measure of proactive behaviour, individuals were asked to rate the extent to which they engaged in each tactic by circling a number from 1 (*to no extent*) to 5 (*to a great extent*). So as to secure a more precise measure of tactic use, a 7-point rating scale was adopted for the present study that used objective units of time. Specific anchors were; A *(never), B (once or twice only), C (once a fortnight), D (once a week), E (2 or 3 times a week), F (once a day),* and G *(2 or 3 times a day).* Using a frequency measure to assess newcomer proactive behaviour has support (Bauer & Green, 1998; Morrison, 1993b). Each alphabetical rating was then recoded to a quantitative score to estimate how many times each behaviour was demonstrated over a 6-week period. More specifically, a rating of 'never' was re-coded as 0 and a rating of

'once or twice only' was re-coded as 1.5. A rating 'once a fortnight' was re-coded as 3, 'once a week' was re-coded as 6, '2 or 3 times a week' was re-coded as 15, 'once a day' was re-coded as 30, and '2 or 3 times a day' was re-coded as 75 times.

Administered at all five time periods, the corrected item-to-total correlations at T1 for this measure ranged from .23 to .45, with an overall Cronbach's alpha of .61. No items could be removed in order to improve scale reliability. With short scales (i.e., less than 10 items), it is quite common to find Cronbach's alphas as low as .5 (Pallant (2005). At T2, the Cronbach's alpha for this measure increased to .68, and between T3 and T5 it was a more acceptable .71, .70, and .75.

Objective proactive behaviour.

An objective measure of police recruit proactive behaviour was also designed using three items that were observable to instructors, namely (a) feedback-seeking behaviour, (b) asking questions, and (c) listening behaviour. Administered at T1, T2, and T3, this measure had a satisfactory and stable Cronbach's alpha (α = .77 to .87). In line with recruit responding, a 7-point scale was used with anchors *'never'* (A) to *'2 or 3 times a day'* (G).

Role breadth self-efficacy.

Role breadth self-efficacy refers to employees' confidence that they can carry out a broader and more proactive set of work tasks that extend beyond prescribed technical requirements (Parker, 1998). On the basis of her work, Parker created a 10-item measure to assess employees' confidence to perform a wide array of proactive, interpersonal, and integrative tasks. These included measures of one's confidence to "Visit people from other departments to suggest doing things differently", "Contact people outside the company (e.g., customers) to discuss problems", and "Design new procedures for your work area". The relevance of these items was limited to the NZ Police, and as such, an entirely new set of task-specific, job-related items were developed.

Each newly created item still tapped into important elements of role breadth self-efficacy as defined by Parker (1998). For example, each item focused on the proactive

use of initiative (e.g., "Organising members of the public at a traffic accident", or "Controlling crowd behaviour at a crime scene"); the use of interpersonal skills including problem solving (e.g., "Quickly evaluating a situation and identifying if any offence has taken place"); conflict management (e.g., "Calming down an abusive member of the public with words"), verbal skill (e.g., "Informing someone of a family member's death with sensitivity", and integration skills (e.g., "Giving evidence in court without prejudicing a case"). To support hypothesis testing, this measure was included at all time periods. At T1, the Cronbach's alpha was acceptable ($\alpha = .78$), with item-to-total correlations in the range of .42 to .60. Between T2 and T5, Cronbach's alphas were also good ($\alpha = .75$ to .82). Item responding was on a 5-point scale using anchors ranging from 1 (*not at all confident*) to 5 *(very confident).*

<u>T2 Measure (12-weeks)</u>

<u>Leader-member exchange.</u>

The theoretical basis of leader-member exchange is that dyadic relationships and work roles are developed over time through a series of exchanges, or interactions between leader and member (Bauer & Green, 1996). At the core of building a high-quality leader-member exchange is the development of interpersonal trust between each party that goes beyond a formal employment contract (Dienesch & Liden, 1986).

One of the most consistently used measures of leader-member exchange is the 7-item scale by Scandura and Graen (1984), which was later modified by Liden et al., (1993). The updated version of this scale was utilised for the present study, with some additional word changes to enhance conciseness and grammatical construction. For example, the item "Regardless of how much power he/she has built into his/her position, my supervisor would be personally inclined to use his/her power to help me solve problems in my work" was shortened to "My section instructor helps me solve work related problems". Jargon such as "I can count on my manager to 'bail me out'…" was replaced with "I can count on my section instructor to help me out…" One item from the original leader-member exchange set was removed (i.e., "How would you describe your working relationship with your supervisor?"), since it did not fit with a 5-

point scale ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*. Corrected item-to-total correlations for this revised measure ranged from .49 to .60, and it had a good Cronbach's alpha ($\alpha = .80$).

The ideal timeframe for measuring the predictive power of leader-member exchange was T1, since this would ensure it was measured in line with all other predictor variables. Since leader-member exchange develops both gradually, and over time however, this variable was not measured until T2, thereby allowing a more accurate indication of this construct.

T3 Measures (18-weeks)

The identification and measurement of three proximal indicators of adjustment were important to the present study, namely task mastery, group fit, and role clarity.

Task mastery.

Task mastery was assessed using four items from Morrison (1993a) and one item designed specifically for the present study: "I have mastered the tasks associated with police training so far". Minor modifications were made to existing items including the rewording of one negatively phrased item into a more positive tone. Specifically, the item "It seems to take me longer than planned to complete my job assignments" was changed to "I feel competent conducting my work assignments". Assessed once at T3, the corrected item-to-total correlations for this measure ranged from .49 to .64, and it had a good Cronbach's alpha ($\alpha = .79$).

Group fit.

Group fit was measured using two items from the 'people' concept developed by Chao et al., (1994) and two items from Morrison (1993a). Minor word changes were again made to each item to better reflect the common language of the police group. For example reference to "coworkers" was changed to "peers". Assessed once at T3, the corrected item-to-total correlations for this measure ranged from .59 to .68, and it had a good Cronbach's alpha ($\alpha = .82$).

Role clarity.

Role clarity was measured using five items from the Rizzo, House, and Lirtzman (1970) scale, and focused on (a) the predictability of response to one's behaviour (e.g., "I know how my performance will be evaluated at work", and (b) the existence or clarity of behavioural inputs to guide behaviour (e.g., "I know what my responsibilities are"). Rizzo et al., (1970) provide support for the content of the role clarity scale. Assessed once at T3, this measure had a good Cronbach's alpha ($\alpha = .82$), with item-to-total correlations of .57 to .73. All responses to task, group, and role clarity items were on a 5-point scale using anchors ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*.

T4 Measures (6-months)

At T4, NZ Police recruits had just completed their first 6-weeks in the field as probationary constables. No new measures were introduced at this time. Instead, NZ Police recruits were only asked to rate their current role breadth self-efficacy and proactive behaviour.

T5 Measures (15-months)

Organisational commitment.

While a number of measures of organisational commitment have been developed, the 15-item Organisational Commitment Questionnaire (OCQ) developed by Mowday, Steers, and Porter (1979) is one of the most frequently used. Conceptually, these authors suggest that organisational commitment can be characterised by three factors: (a) a belief in, and acceptance of, the organisation's goals and values, (b) a willingness to exert considerable effort on behalf of the organisation, and (c) a desire to maintain membership in the organisation (Mowday et al., 1982).

While researchers have used various positively and negatively worded combinations of the 15-item OCQ, the negatively worded item set generally correlates less highly with the total score than positively worded items (Mowday et al., 1979). When a shorter scale is desired Mowday et al., recommend using the positively worded items only. To support the use of the shortened OCQ with the police sample, minor word modifications were made. Firstly, reference to "I talk up this organisation…" was

changed to "I promote the NZ Police…." and reference to "….the fate of this organisation" was changed to "…the reputation of the NZ Police". The item "I am extremely glad I chose this organisation to work for over others I was considering at the time" was problematic in that, for some participants, this was the only job being considered. Less confusing wording was therefore adopted which made reference to "…other organisations I could have joined". Items were measured on a 5-point scale with anchors ranging from 1 *(strongly disagree)* to 5 *(strongly agree)*. Since organisational commitment is best appraised post-appointment (Mowday et al., 1982), this measure was only administered once at T5. Corrected item-to-total correlations ranged from .44 to .69, and it had a good Cronbach's alpha ($\alpha = .87$).

On-the-job performance.

At T5 an independent measure of on-the-job performance was also sought for each probationary constable. The intention was that a group of police instructors would visit each constable in the field, and over a period of 3 to 4 hours, they would observe and rate each individual's community and file work. Despite the best efforts of individual instructors, the prolonged absence of up to three instructors from the college at any one time was untenable. This mode of data gathering was therefore discontinued beyond the first wing intake.

As an alternative, each constable was invited to rate their own performance post-college using the same 19-item set developed for police instructors. Given the uniqueness of the police environment, this was an entirely bespoke measure that tapped into such areas as (a) the selection of appropriate tactical options in a situation, (b) the maintenance of complete police file notes, and (c) driving a police vehicle safely. Each item was premised with the statement "How much development do you think you still need to…." with responses on a 5-point scale that ranged from 1 *(a great deal of development)* to 5 *(no development)*. Included once at T5, the corrected item-to-total correlations for this measure ranged from .57 to .74, and it had an excellent Cronbach's alpha ($\alpha = .94$).

Factor Analysis of Newly Created NZ Police Measures

An important set of preliminary analyses involved checking the underlying factor structure of each newly created measure for the NZ Police (i.e., prior work, job interest, proactive behaviour, role breadth self-efficacy, and on-the-job performance). The output from this analysis is shown in Table 4.

Table 4
Output from a PCA Analysis of Newly Created NZ Police Measures

Time	Measure	No. of components	% of variance
T1	Prior work	1	66.62
T1	Job interest	1	66.23
T1	Role breadth self-efficacy	2	55.90
T1	Proactive behaviour	3	58.35
T5	NZ Police performance	3	61.20

A principal components analysis (PCA) revealed that each newly created measure had eigenvalues exceeding 1 and that these explained between 56% and 67% of the variance in each measure. Parallel analysis (Watkins, 2000) showed that in the case of the proactive behaviour and role breadth self-efficacy measures, only one component had an eigenvalue which exceeded the corresponding eigenvalue for a randomly generated data matrix of the same size. Parallel analysis is a recognised technique for determining the number of factors to retain (Pallant, 2005). In this instance, it supported the decision to retain only one component for the proactive behaviour and role-breath self-efficacy measures for further analysis. As shown in Table 5, a PCA and scree plot supported a three component model for the NZ Police performance measure; although parallel analysis revealed that a two component model was potentially more viable.

Table 5

Comparison of Eigenvalues and Criterion Values for the NZ Police Performance Measure

Component number	Eigenvalue from PCA	Criterion value from parallel analysis	Decision
1	9.101	1.4121	Accept
2	1.462	1.3321	Accept
3	1.066	1.2731	Reject
4	.987	1.2245	Reject

A varimax rotation was then performed using both a two and three component model for the police performance scale. Results showed that items clustered more logically in a three component model, and collectively explained more of the variance in recruit overall performance when compared to a two component model (i.e., 61% of the variance compared to 56%). While some moderately high cross-loadings existed, only the highest loading items on each component were used to help identify the underlying construct being represented. No items were included in multiple components.

An inspection of Table 6 reveals that the items loading on component 1 best reflected the 'operational' aspect of policing. In contrast, component 2 was more indicative of 'tactical' policing, while component 3 was more indicative of the 'communication' role police officers play. The results of this analysis supported treating the NZ Police performance scale as three distinct sub-scales focusing on the operational, tactical, and communication components of a police officer's role. Corrected item-to-total correlations for each sub-scale ranged from .59 to .74, and each had a good Cronbach's alpha (α = .84 to .90).

Table 6

The Pattern/Structure of a Three Component Solution for the NZ Police Performance Measure using a PCA with Varimax Rotation

Component	Item[a,b]	Item description	Component Label		
			Operational	Tactical	Communication
	Q6 62	Demonstrating police values	.80		
	Q6 61	Building positive work relationships	.78		
	Q6 58	Mixing with public	.76		
1	Q6 60	Networking with peers	.70		
	Q6 59	Carry out activity to standard	.65	.39	
	Q6 54	Using police technology appropriately	.56	(.41)	
	Q6 57	Remaining calm under pressure	.56	(.40)	
	Q6 63	Maintaining full file notes	.50	.33	
	Q6 50	Driving safely	.49	(.44)	
	Q6 53	Seeing links between information		.78	.34
	Q6 56	Using initiative	(.40)	.71	
2	Q6 55	Being decisive	(.42)	.69	
	Q6 52	Gathering information		.69	.32
	Q6 51	Selecting appropriate tactical options	(.46)	.51	.31
	Q6 46	Using open questions			.77
	Q6 45	Providing impartial advice		.39	.72
3	Q6 47	Listening effectively	(.41)		.69
	Q6 48	Recording discreet notes			.66
	Q6 49	Quickly respond to calls for assistance	.33		.65

Note.
[a]Q6 denotes Questionnaire 6. [b]The number following Q6 denotes the questionnaire item. [c]Bracketed numbers indicate those items that were excluded from component 1, 2 or 3.

Summary of NZ Police Measures

Table 7 provides a summary of all research measures and the timeframe in which they were administered with the NZ Police group.

Table 7

Administration Schedule for NZ Police Measures

	Research measure	Pre-entry	T1	T2	T3	T4	T5
Demographic indicators	Age, Gender, Ethnicity		X	X	X	X	X
Individual predictors	Fluid intelligence	X					
	Number of jobs		X				
	Prior work experience		X				
	Job interest		X				
	Proactive personality		X				
	Proactive behaviour (instructor rating)		X	X	X		
Group predictor	Team support		X				
Organisational predictor	Leader-member exchange			X			
Individual mediating variables	Role breadth self-efficacy		X	X	X	X	X
	Proactive behaviour		X	X	X	X	X
Proximal criterion	Task mastery				X		
	Group fit				X		
	Role clarity				X		
Distal criterion	Organisational commitment						X
	On-the-job performance (self-rating)						X

<p style="text-align: center;">Research Intervention</p>

As discussed in chapter 3, an important aspect of the present study was to explore the impact of behavioural training on future proactive behaviour among new police recruits. To date, prior studies have shown a positive link between training in various proactive behaviours and numerous outcomes. With the exception of Axtell and Parker (2003) and Kirby et al., (2002), this work has largely neglected the link between behavioural training and future proaction. In an effort to address this research gap, an experimental design was adopted in the present study. This included four intervention groups as shown in Table 8.

Table 8
Summary of Interventions for NZ Police

Group	Intervention	*n*
Pilot (Wing 226)	None	74
Proactive training (Wing 227)	Coaching 4 behaviours (2 hrs per behaviour/per fortnight = 8 hrs)	79
Proactive training (Wing 228)	Coaching 4 behaviours (2 hrs per behaviour/per fortnight = 8 hrs)	40
LMX (Wing 229)	One-to-one targeted behavioural training with instructor (week 1, 6, 12 and 18 = 8 hrs)	80
Placebo (Wing 230)	Pre-exam study skills training (2.5 hrs in week 6, 12 and 18) = 7.5 hrs	100
Control (Wing 231)	None	96

Proactive training group.

Wing groups 227 and 228 were randomly selected to participate in a proactive training intervention. The already intense police timetable meant that only 8 hours of face-to-face time could be allocated to training over an 18-week period. To ensure this time was used to best effect, the eight proactive behaviours were randomly split into combinations of four, and administered separately to each wing section on a fortnightly basis. Wing 227 recruits were trained in active listening, asking questions, seeking instructor feedback, and positive framing. In contrast, wing 228 recruits were trained in

relationship building, networking, seeking peer feedback, and observation/modeling. Each topic was presented once, before learning was extended, and reinforced in a second follow-up session.

All training material was developed on a bespoke basis by me, and included instructor pre-reading plus delivery notes and participant handouts. Please see Appendix C for a copy of all police recruit proactive training material. Typically, the delivery of non-core training was seen as voluntary by some police recruits and often perceived to have less importance. On the advice of Police College personnel, training was therefore delivered by wing instructors as part of the regular timetable. This had the impact of increasing the perceived credibility of training (an important feature given the innately critical nature of police recruits), and in turn, maximised recruit attendance. Prior to training delivery, all wing instructors received instruction which was aimed at familiarising them with training content, positioning, and scheduling, and to ensure consistency in programme delivery.

A number of factors were also put in place to minimise the decay of proactive behaviour among police recruits who participated in training. These included the opportunity to immediately practice newly acquired skills, the provision of continued practice, a high level of similarity between practice and retrieval environments, and a focus on natural rather than artificial tasks (Arthur, Bennett, Stanush, & McNelly, 1998; Stothard & Nicholson, 2001).

Leader-member exchange group.

In line with leader-member exchange theory, a high-quality exchange is characterised by an elevated level of trust and support between newcomer and leader. To explore the impact of this relationship on future recruit proaction, a bespoke training module was designed and delivered by me to police instructors from wing 229. Please see Appendix D for a copy of leader-member exchange material. In line with Graen et al., (1982) instructors were trained in the importance of (a) spending time talking about each person's unique concerns, (b) being sensitive to issues raised, and (c) sharing personal insights without imposing their perspective on issues.

Standard college timetabling meant that each recruit only met one-to-one with their designated instructor on the first and last week of their tenure at college. For recruits in wing 229 however, a series of meetings were scheduled with each instructor at week 1, and prior to each performance exam at week 6, 12, and 18. To guide each meeting, each recruit was asked to rate their own performance in important skill and behavioural areas. As part of my coaching of Wing instructors, time was spent in how to facilitate a feedback session using recruit self-ratings. Instructors were also coached in how to engender high levels of mutual trust with each recruit via rapport building, constructive two-way conversation, active listening, and questioning behaviour. These behaviours are known to underpin a high-quality exchange (Bauer & Green, 1996).

Placebo group.

For the purpose of the present study, wing 230 was assigned to the placebo group. As a placebo, this group received training that was of personal benefit but was perceived to have no connection with research objectives. In consultation with NZ Police, this group received study skills support which was delivered three times prior to each performance exam, and for up to 2.5 hours per session. Specific training content included such things as (a) the use of internal police resources, (b) how to effectively revise for exams, (c) an introduction to different learning styles, and (d) strategies for retaining information. Training content was delivered by an in-house NZ Police behavioural specialist and in line with standard course content.

Control.

For the purpose of the present study, wing 231 was randomly assigned to the control group. As such, no intervention was applied to this group, nor did any instructor with wing 231 have any involvement in the design or delivery of other interventions.

As a final note, it is important to acknowledge that all police instructors were practiced in training delivery and saw training as a core function of their role. While every effort was taken to ensure consistency in programme delivery, it was impractical for me to observe each instructor training session to more objectively verify effectiveness of programme delivery. To maintain data rigor, Police instructors were not informed of the wider research goals, or the connection between instructor questionnaires and potential training outcomes.

Host Organisations 2 – Private and Public Sector Employers

<u>Introducing Host Organisations</u>

Between June 2005 and December 2006, an approach was made to 14 organisations that were known to recruit multiple graduate employees inside the New Zealand public and private sector. Inside this time, a combination of presentations, face-to-face meetings, and written documentation was provided to each organisation detailing the nature of my research, objectives, and proposed outcomes. Ten organisations confirmed their interest, and provided access to graduate names and email addresses via each Human Resource department. Each graduate organisation involved in the present study loosely fell into one of two broad categories: public sector or private sector.

Public sector

Organisation A, B, and C each recruited graduates from a wide range of disciplines, but most notably from economic, business, and engineering backgrounds. In the case of Organisation A and C, graduates were often selected as full time employees from a summer internship programme that operated across both organisations. Selection into Organisation B's graduate programme was dependent on the successful completion of a one-day practical assessment centre. This included a combination of ability and personality testing, a competency based interview, and multiple work-based simulations. Once inside organisation A, B, and C, each graduate was appointed a senior coach and mentor, with full time support delivered via a dedicated graduate coordinator. Organisation A and B also offered a structured, graduate programme that involved the rotation of graduates through multiple business units.

Private sector

Organisation D, E, F, G, H, I and J were all multi-disciplinary organisations, and were typically the largest providers in their industry sector. Each of these organisations offered a comprehensive, graduate rotational programme, and in the case of organisation D, F, and J, this included the potential of overseas experience. Each organisation therefore tended to attract a high volume of graduate CVs, and implemented a stringent selection process. Selection into each of these organisations typically included some form of psychometric assessment, competency-based interview, and practical job-relevant simulation.

Organisation F and J both operated broadly in the construction sector. Given the specific skill set each organisation sought, graduate employees tended to be recruited via an active internship programme. During internship, each graduate was provided with meaningful work experience, technical and non-technical training, regular mentoring, and feedback. For all remaining organisations, key elements of the graduate programme included (a) managed role rotations throughout the business, (b) the allocation of a senior business mentor, and (c) regular structured training and development sessions. Each graduate programme typically ran for a period of 2 years.

Participants

Table 9 provides a summary of demographics for the university graduate sample. Each member of this group was employed by 1 of 10 participating organisations, and commenced employment between October 2005 and March 2006, either in cohort with others ($n = 79$) or individually ($n = 53$).

Table 9
University Graduate Demographics

		Frequency	Percent
Organisation	Organisation A	7	5.3
	Organisation B	17	12.9
	Organisation C	7	5.3
	Organisation D	26	19.7
	Organisation E	9	6.8
	Organisation F	14	10.6
	Organisation G	17	12.9
	Organisation H	15	11.4
	Organisation I	14	10.6
	Organisation J	6	4.5
	Total	**132**	**100.0**
Age	21 to 30	131	99.2
	31 to 40	1	.8
	Total	**132**	**100.0**
Ethnicity	Māori	2	1.5
	New Zealand European	93	70.5
	Pacific persons	1	.8
	Asian	23	17.4
	UK/European	2	1.5
	Other	6	4.5
	Missing	5	3.8
	Total	**132**	**100.0**
Gender	Male	68	51.5
	Female	64	48.5
	Total	**132**	**100.0**
Number of jobs[a]	No prior	40	30.3
	1 job	16	12.1
	2 jobs	27	20.5
	3 jobs	22	16.7
	4 jobs	8	6.1
	5 or more jobs	19	14.4
	Total	**132**	**100.0**

Note. [a]Included all full-time or part time jobs, not temporary or student holiday jobs

<u>Informed participant support.</u>

Of the 10 organisations involved in the present study, seven organisations had a formal induction programme for graduate employees. Time was therefore set aside during the induction process to meet each graduate and seek their consent for research participation. The absence of an induction programme and the rolling start of graduates inside the remaining three organisations made it impractical to bring these groups together prior to research commencement. As an alternative, individuals were advised that they would receive an email concerning my research and were encouraged to participate by each in-house liaison person. Follow-up phone contact allowed me to discuss the proposed study in more detail and address any concerns or queries with individual employees.

Some graduates were eliminated from research participation on the grounds that they (a) had been employed for more than 6-weeks, (b) were only employed on a part-time basis, and were still completing university study, or (c) were planning to work abroad with their employing organisation. Graduate employees could also decline to participate; yet none chose to do so. Given the geographical spread of the graduate group it was practically impossible to administer each questionnaire in a face-to-face format. Instead, questionnaires were emailed to each graduate on the first Monday of each 6-week period, with completed responses to be returned electronically by the end of that week. Two email reminders were sent to each graduate who missed the due date for questionnaire return.

<div align="center">Data Gathering</div>

<u>Questionnaire design.</u>

Between July 2005 and September 2005 each study questionnaire was customised for the graduate group. In particular, specific attention was given to the inclusion of corporate dialogue and the inclusion of examples and terms that would meaningfully reflect the experiences of graduate employees. The content of each questionnaire was approved by each graduate coordinator with whom I worked before distribution. All changes to the item content of each measure is discussed more fully in the section 'Research Measures'.

Questionnaire delivery.

With respect to data gathering, the first questionnaire (T1) was administered 6-weeks post-appointment for each graduate. A second questionnaire (T2) was administered at 12-weeks (3-months), and a third questionnaire (T3) was administered at 18-weeks (4.5-months). The final questionnaire (T4) was administered at 24-weeks, and represented 6-months post-appointment. For practical reasons, a four-questionnaire measurement model was adopted for graduates, rather than the more comprehensive five questionnaire model used with the NZ Police. Five organisations involved in the present study utilised a rotational programme for graduates that operated on a 6-monthly cycle. Data gathered from these organisations post- 6-months was therefore at risk of considerable contamination. Since these five organisations contributed to over half the study sample, the decision was made to pursue the best quality data, even though this meant adopted a shorter time frame for measurement than the NZ Police group.

Research Measures

Detailed below is a summary of all research measures, grouped according to the time period in which they were first introduced.

Pre-Study Measure

Fluid intelligence.

Three organisations in the present study assessed fluid intelligence prior to graduate selection and collectively made up 39% of the total graduate sample. In each case, the Graduate Reasoning Test Battery (GRT1) developed by Psytech International (Budd, 1993) was the cognitive ability test of choice. For consistency, all remaining graduates involved in this study were tested using the GRT1. The equivalency of the GRT1 with the alternative GRT2 utilised by the NZ Police has already been confirmed (Budd, 1993).

T1 Measures (6-weeks)

Demographic indicators.

The demographic indicators used with the NZ Police group were also adopted for the graduate group with the exception of the QID unique identifier. In its place, participants were asked to provide the initials of their name and date of birth.

Prior work experience.

Minor word changes were made to the three prior work experience items before delivery with the graduate group. These changes included replacing reference to "the police force" with "my employer" and "my job". Item responding was sought at T1 only, with corrected item-to-total correlations for this measure ranging from .47 to .61. It had a satisfactory Cronbach's alpha ($\alpha = .72$).

Number of jobs.

As a supplement to the prior work measure, graduate employees were asked to indicate the specific number of jobs they had previously held. In line with the NZ Police group, job experience was assessed with the item, "How many jobs have you held in the last 5 years?" and was rated on the same 6-point scale ranging from 1 (*no prior jobs)* to 6 *(5 or more jobs).* This item was administered once at T1.

Job interest.

The three job interest items created for the present study were modified to have appropriateness with the graduate group. Word changes included replacing reference to "police officers" with "my colleagues" and "this organisation". Administered at T1 only, the corrected item-to-total correlations for this measure ranged from .52 to .69. The Cronbach's alpha was also satisfactory ($\alpha = .76$).

Proactive personality.

No further modifications were made to the reduced 9-item Seibert et al., (1999) measure of proactive personality. Administered once at T1, the corrected item-to-total correlations for this measure ranged from .44 to .66, and it had a good Cronbach's alpha ($\alpha = .84$).

<u>Team support.</u>

A single word change to replace "the Police College" with "this organisation" was made to the team support measure before use with the graduate group. Administered once at T1, the corrected item-to-total correlations for this measure ranged from .64 to .82, and had a good Cronbach's alpha (α = .84).

<u>Proactive behaviour.</u>

The 8-item proactive behaviour measure was modified to have appropriateness with the graduate group. Word changes included replacing reference to "other recruits" and "my section instructor" with "other employees" and "the person I report to". Whereas this measure lacked reliability at T1 with the NZ Police sample, a more satisfactory Cronbach's alpha was found with graduates at T1 (α = .72), and again between T2 and T4 (α = .69 to .72).

<u>Objective proactive behaviour.</u>

No changes were made to the 3-item proactive behaviour measure before use with graduate managers. Administered at T1, T2, and T3, this measure had a satisfactory and stable Cronbach's alpha (α = .69, .73 and .70). In line with NZ Police responding, a 7-point scale was used for graduate managers with anchors that ranged from A *(never)* to G *(2 or 3 times a day).*

<u>Role breadth self-efficacy.</u>

Whereas a bespoke role breadth self-efficacy measure was adopted for the NZ Police, six items from Parker's (1998) 10-item measure of role breadth self-efficacy were appropriate with the graduate group. In each case, only minor word changes were required to ensure application across all graduate jobs. Firstly, the phrase "analysing a long-term problem" was replaced with "analysing a complex problem" and reference to "suppliers and customers" was adapted to also include "stakeholders". The item "Making suggestions to management…" was adjusted to "Persuading someone more senior to me…" so as to not discount situations in which graduates made improvement suggestions to senior personnel who were not in a managerial role.

Discussion with graduate liaison staff also revealed that a key task for a lot of graduates was the need to quickly build new relationships. This is also acknowledged by Parker (1998) as being an important component of role breadth self-efficacy. To this end, a specific item to assess each graduate's confidence with respect to relationship building was also developed (i.e., [how confident are you in terms of] "Quickly building relationships with people you don't know"). In line with NZ Police responding, items were measured on a 5-point scale, with anchors ranging from 1 (*not at all confident*) to 5 *(very confident)*. The Cronbach's alpha for the revised Parker measure at T1 was .83, with item-to-total correlations in the range of .49 to .66. Consistent with the NZ Police, role breadth self-efficacy was measured across all time periods, and showed good Cronbach's alphas (α = .83 to .85).

T2 Measure (12-weeks)

Leader-member exchange.

A single word change to replace "my instructor" with "my manager" was made to the 6-item leader-member exchange scale (Liden et al., 1993; Scandura & Graen, 1984) before use with the graduate group. Consistent with the NZ Police, this measure was administered once at T2, with corrected item-to-total correlations ranging from .50 to .72, and had a good Cronbach's alpha (α = .84).

T3 Measures (18-weeks)

Consistent with the NZ Police group, three proximal indicators of adjustment were of particular importance in graduate analysis; namely task mastery, group fit, and role clarity. Minor word changes were made to existing items including replacing reference to "my section" and "recruits" to "my team" and "employees". Corrected item-to-total correlations ranged from .58 to .68 for task mastery, from .57 to .69 for group fit, and .44 to .83 for role clarity. Overall Cronbach's alphas showed good internal consistency reliability (α = .82 to .86).

T4 Measures (6-months)

Organisational commitment.

Minor word changes were made to the shortened OCQ (Mowday et al., 1979) measure before use with the graduate sample. These changes included replacing

reference to "the NZ Police" and "police officer" with "this organisation" and "the work I do". Administered once at T4, the corrected item-to-total correlations for this measure ranged from .52 to .77. It also had a good Cronbach's alpha (α = .88).

On-the-job performance ratings.

While it was not possible to secure an independent measure of performance for police recruits, graduate managers did agree to rating graduate performance at T4 of questionnaire delivery. Given the spread of experiences presented to each graduate, a non-organisationally specific measure of job performance was developed for the present study. This was based on seven specific performance-related dimensions identified by Campbell (1990) and Campbell et al., (1993). In particular, items focused on the volume of work, standard of work, clarity of communication, team-working, job effort, maintaining personal discipline, and job knowledge. An overall measure of performance was also sought. The behavioural nature of this measure is supported by Viswesvaran (2001) in so much as it did not include anything that was beyond a graduate's control.

Graduate employees were not informed of the performance evaluation completed by each manager. This step was taken so as to minimise the risk that individuals would consciously behave in ways they presumed were important on the grounds they were being observed. In turn, managers were not informed about any research hypotheses, the nature of any training interventions, nor the intervention group in which their staff were included. This step was taken to avoid any leader-follower Pygmalion effect (Chen & Klimoski, 2003; Eden, 1990).

The administration of the graduate performance questionnaire was by email. Reminder messages and direct phone calls were then made to individual managers to maximise responding. Since a number of managers had responsibility for multiple graduates, I did not want to jeopardise their support by developing a questionnaire that required more than 5 minutes to complete. Administered once at T4, the corrected item-to-total correlations for this 8-item measure ranged from .68 to .84, and had an excellent Cronbach's alpha (α = .94). All item responding was on a 5-point scale using anchors that ranged from 1 *(a great deal of development)* to 5 *(no development)*.

<u>Factor Analysis of Newly Created Graduate Measures</u>

A final set of analyses involved checking the underlying factor structure of each newly created measure for the graduate group (i.e., prior work, job interest, proactive behaviour, and performance). The output from this analysis is shown in Table 10.

Table 10

Output from a PCA analysis of Newly Created Graduate Measures

Time	Measure	No. of components	% of variance
T1	Prior work	1	64.87
T1	Job interest	1	67.91
T1	Proactive behaviour	2	48.26
T4	Graduate performance	1	70.10

A principal components analysis (PCA) revealed that each newly created measure had eigenvalues exceeding 1, and that these explained between 48% and 70% of the variance in each measure. In the case of proactive behaviour, parallel analysis (Watkins, 2000) supported the decision to retain only one component from this measure for further analysis. The output from this analysis is shown in Table 11.

Table 11

Comparison of Eigenvalues and Criterion Values for the Graduate Proactive Behaviour Measure

Component number	Eigenvalue from PCA	Criterion value from parallel analysis	Decision
1	2.791	1.3955	Accept
2	1.070	1.2375	Reject

Summary of Graduate Measures

Table 12 provides a summary of all research measures and the timeframe in which they were administered to the graduate group.

Table 12

Administration Schedule for Graduate Measures

	Research measure	Pre-entry	T1	T2	T3	T4
Demographic indicators	Age, Gender, Ethnicity		X	X	X	X
	Fluid intelligence	X				
	Number of jobs		X			
Individual predictors	Prior work experience		X			
	Job interest		X			
	Proactive personality		X			
	Proactive behaviour (manager rating)		X	X	X	
Group predictor	Team support		X			
Organisational predictor	Leader-member exchange			X		
Individual mediating variables	Role breadth self-efficacy		X	X	X	X
	Proactive behaviour		X	X	X	X
	Task mastery				X	
Proximal criterion	Group fit				X	
	Role clarity				X	
Distal criterion	Organisational commitment					X
	On-the-job performance (manager rating)					X

Research Intervention

For the purpose of the present study an experimental design was adopted and included two intervention groups as shown in Table 13.

Table 13
Summary of Interventions for Graduate Organisations

Group	Intervention	*n*
Proactive training	Coaching 4 behaviours per organisation (1 day = 8 hrs)	62
Control	None	70

With a smaller number of graduate employees relative to the NZ Police sample, it was not possible to replicate all four police intervention groups (i.e., proactive training, leader-member exchange, placebo, and control). Instead, graduates were separated into one control group ($n = 70$) and one proactive training group ($n = 62$). Neither the leader-member exchange nor placebo intervention was replicated with graduates. All NZ Police training material was customised by me to ensure fit for purpose with a graduate cohort.

Proactive training group.

With the spread of graduates across New Zealand, it was impractical to replicate the fortnightly coaching sessions adopted by the NZ Police. Instead, five organisations which brought graduates together for employee induction each set aside one day for face-to-face training in proactive behaviour. Consistent with the NZ Police group, each of these organisations were randomly assigned training in four proactive behaviours; having first controlled for an equal allocation of behaviours by graduate numbers. Table 14 provides a summary of proactive training by graduate organisation.

In the police environment, all training was delivered by a wing instructor so as to position each session more credibly. Because police instructors were practiced in training delivery they understood the importance of coaching to a consistent standard,

and saw training as a core function of their role. Unlike police instructors, not all graduate liaison staff were practiced in training delivery, nor did they see staff training as a primary role responsibility. As such, there was a greater risk of variability if training was conducted in-house by graduate organisations. Without exception, the involvement of an external 'expert' was also deemed to be more credible with graduate employees. In light of these combined risk factors, the decision was made to deliver all graduate training myself.

Table 14
Summary of Proactive Training by Graduate Organisation

	Organisational Tactic	
Proactic Tactic	**Organisation A, E, & H** = 31 participants	**Organisation B & I** = 31 participants
Active listening	x	
Observation/modeling	x	
Relationship building	x	
Seeking manager feedback	x	
Asking questions		x
Positive framing		x
Seeking peer feedback		x
Networking		x

As shown in Table 15, the format of each graduate training day followed a consistent timetable and included a combination of instruction, discussion, and practical exercises to solidify learning. For participating organisations, all training was delivered during the graduate induction process (i.e., within the first 2 to 4 days of graduate employment). Consistent with the NZ Police intervention, follow-up material to reinforce key behavioural ideals was customised for graduate staff. Material was distributed by email on a fortnightly basis for 16-weeks (i.e., between T1 and T3) so as to follow the same pattern of delivery by the NZ Police as much as practically possible.

Table 15
Summary of Graduate Training Schedule

Graduate Training	
Time	**Programme Content**
8.30 am to 8.45 am	Welcome and overview of day
8.45am to 10.15 am	Tactic one introduction, discussion and practical exercises
10.15 am to 10.30 am	**Break**
10.30 am to 12 noon	Tactic two introduction, discussion, and practical exercise
12 noon to 1 pm	**Lunch break**
1 pm to 2. 30 pm	Tactic three introduction, discussion, and practical exercises
2.30 pm to 4 pm	Tactic four introduction, discussion, and practical exercises
4 pm to 5 pm	Overview and wrap up

Control.

Seventy graduates formed part of the graduate control group in the present study. Consistent with the NZ Police process, this group received no information or material that was shared with members of the intervention group. The geographical spread of graduate employees meant that any inadvertent sharing of experiences across control and intervention groups was highly unlikely. In addition, there was no known organisational-wide assembly of graduates for any intervention or control group during the period of questionnaire administration. As a consequence, the sharing of information between graduates from within the same organisation was also kept to a minimum.

Summary

In chapter 4 a description of each study group, questionnaire measures, and the procedure for gathering data inside the NZ Police and graduate group is provided. Research results are presented in chapter 5, together with specific evidence to support or refute each hypothesised relationship.

CHAPTER 5
RESULTS

In chapter 5, the results from testing each hypothesis are presented in turn for both the NZ Police (Study 1) and graduate group (Study 2). The results for each group are presented in an identical format. Firstly, a summary of all preliminary data analysis is covered, including the handling of missing data, checks for skewness and kurtosis, and participant attrition. Secondly, the results from a series of preliminary tests are presented to confirm the psychometric robustness of each mediating variable (i.e., role breadth self-efficacy and proactive behaviour). In the third part of each study, the results for each hypothesis which lent itself to SPSS (version 14, 2005) are presented; followed by the testing of each hypothesised model using structural equation modeling (AMOS, version 6, Arbuckle, 1997).

While both statistical packages were appropriate for describing the relationship among variables, structural equation modeling (SEM) was chosen as a more powerful tool for testing multiple variables at once, while taking measurement error and shifts of time into account. The option in SEM to compare alternative models to assess relative model fit also made it a more robust substitute to multiple regression, since the latter is highly susceptible to error of interpretation by misspecification (Garson, 2008).

Study 1: NZ Police

<u>NZ Police Preliminary Analysis</u>

Questionnaire responses from 394 NZ Police recruits were manually entered into an excel spreadsheet and then transferred to SPSS (2005). This dataset was then checked for outliers, data entry errors, missing data, and mid-point responding (e.g., 1.5, 2.5, and so on). In each case, mid-point ratings were rounded up to the nearest whole number, such that a rating of 1.5 became 2 and 2.5 became 3. Less than 5% of data for each item was a mid-point rating, and data-rounding to the nearest whole number was an acceptable statistical approach (Cramer, 1998). Descriptive statistics were used to

obtain an initial measure of data normality by creating a histogram for each variable at an item level.

Because the same demographic identifiers were used across all measurement time points, it was also necessary to check the consistency of self-reported indicators. Where discrepancies in age and ethnicity existed, the most frequently occurring response was chosen to represent that individual.

At this point, the decision was made to include the leader-member exchange variable (measured at T2) in all T1 analyses. The first time point for measurement thereby shifted from 6-weeks to an average of 7-weeks. Since the exchange with one's manager was expected to develop over time, there was no theoretical rationale for measuring this variable any sooner. As a predictor of important socialisation outcomes however, there was a practical benefit to including this variable alongside all others at T1 (H. Cooper-Thomas, personal communication, October 5, 2007). In all subsequent discussion, the leader-member exchange variable is therefore presented as a T1 measure.

Handling missing data.

Seven recruits from the NZ Police sample did not complete the T1 questionnaire while a further 3 recruits omitted to complete one section of this questionnaire. As the baseline measure for all future analysis, each recruit was completely removed from the police dataset. In line with Tabachnick and Fidell (2001), participants with more than 5% missing data post-T1 were deleted from analysis for that specific time period only. For participants with less than 5% random, missing values, a process of mean substitution was adopted as a conservative approach to data replacement (Tabachnick & Fidell, 2001). A tally of final participant numbers for the NZ Police group is shown in Table 16.

Table 16

Summary of Responding by NZ Police Recruits (T1 to T5)

	Valid cases		Missing cases	
	N	Percent	*N*	Percent
T1 (7-weeks)	376	97.9%	8	2.1%
T2 (12-weeks)	366	95.3%	18	4.7%
T3 (18-weeks)	356	92.7%	28	7.3%
T4 (24-weeks)	320	83.3%	64	16.7%
T5 (15-months)	241	62.8%	143	37.2%

Note. *N* = 384

Checking for skewness and kurtosis.

Total scale scores were calculated for each NZ Police variable. Histograms and boxplots were also used to visually inspect the pattern of responding and to check for outliers. Extreme item ratings were checked to reconfirm the accuracy of recording and for any evidence of random responding. Rather than remove extreme outliers, these ratings were changed to the closest, less extreme value, thereby ensuring that a participant was retained in a dataset without distorting output (Pallant, 2005).

With the creation of scale scores, data normality could also be more thoroughly assessed for continuous variables by checking skewness and kurtosis. Since the police dataset was > 300, an absolute skewness or kurtosis statistic above two was interpreted as evidence of non-normality (Fife-Schaw, 2007). Results showed that no police variable exceeded this level.

Participant attrition.

Preliminary analysis was also conducted to verify the extent to which participant attrition from the police sample was random. Rather than assess attrition at all time points, missing data was explored at T5 only, since this period represented the greatest reduction in questionnaire completion. Dependent variables were all T1 measures: (i.e.,

prior work, fluid intelligence, job interest, proactive personality, team support, and leader-member exchange), since the most complete dataset was held at this time.

Results for a 2 (time: T1, T5) by 2 (group: missing, non-missing) ANOVA found that there were no statistically significant differences in the T1 scores between participants and non-participants at 15-months; $F(6, 319) = .493$, $p = .81$, partial $\eta^2 = .01$. Because the multivariate effects for group were not significant, univariate effects between dependent variables were not examined. These results suggest that there was no significant difference in prior work, fluid intelligence, job interest, proactive personality, team support, and leader-member exchange between NZ Police recruits who dropped out of the present study and those who remained.

Demographic differences and attrition.

Analysis was also conducted to explore whether participant attrition was linked to three distinct demographic indicators; age, ethnicity, and gender. Given the relatively small spread of participants for age and ethnicity, both demographics were recoded into two categories. For age, the categories were < 20 to 30 years ($n = 262$) and 31 + years ($n = 122$). For ethnicity the categories were New Zealand European ($n = 275$) and all other ethnicities ($n = 109$). Results from a crosstab analysis are presented in Table 17, and suggest that NZ Police attrition was non-systematic for all time periods and across all demographic indicators.

Table 17
Chi-Square Tests of Attrition for the NZ Police

Demographic	x^2	p
Gender T2	.01	.91
T3	.05	.83
T4	.38	.54
T5	.22	.64
Ethnicity T2	.00	.95
T3	1.8	.18
T4	.31	.58
T5	.32	.57
Age T2	.14	.71
T3	.00	.97
T4	1.6	.20
T5	.11	.75

Note. *df* = 1 for all analysis

A 2 (gender: male, female) by 2 (ethnicity: New Zealand European, non-New Zealand European) by 2 (age: < 20 to 30, 31 + years) MANOVA was also conducted to explore the extent to which participant demographics might minimise the generalisability of results. Prior work, fluid intelligence, job interest, proactive personality, team support, and leader-member exchange were again used as the dependent variables. Multivariate results found a significant effect for police age; $F(6, 306) = 3.56$, $p < .01$, partial $\eta^2 = .65$; a significant gender by ethnicity interaction; $F(6, 306) = 2.85$, $p \leq .01$, partial $\eta^2 = .05$, and a significant age by ethnicity by gender interaction; $F(6, 306) = 2.73$, $p \leq .01$, partial $\eta^2 = .05$.

Univariate effects indicated that there was a statistically significant effect of fluid intelligence for police age; $F(1, 311) = 14.1$, $p < .01$, partial $\eta^2 = .04$, with police recruits who were < 20 to 30 years of age scoring slightly higher on the measure of fluid intelligence ($M = 19.73$, $SE = .33$) when compared to police recruits aged 31 + years of

age (M =17.61, SE = .46). Univariate effects also found a statistically significant gender by ethnicity interaction for leader-member exchange: $F(1, 311) = 8.01, p \leq .01$, partial $\eta^2 = .03$, with non-New Zealand females reporting a slightly lower-quality relationship with their instructors ($M = 25.00, SE = .64$) compared to New Zealand females ($M = 25.97, SE = .34$). At the same time, non-New Zealand males rated a higher quality relationship with their instructors ($M = 26.19, SE = .33$) compared to New Zealand males ($M = 24.82, SE = .22$). The three-way age by ethnicity by gender interaction was not interpreted any further as a consequence of small cell sizes (i.e., 6 non- New Zealand females were between 31 to 50+ years of age). In line with Cohen (1988), the interaction between police age and intelligence was not explored any further since this was a 'small' effect size. There was no theoretical reason to expect any other interaction and so no additional analysis was undertaken.

Testing the Psychometric Robustness of each Mediating Variable for the NZ Police

Chapter 3 presents a strong theoretical and empirical argument for the importance of role breadth self-efficacy and newcomer proaction in facilitating positive adjustment outcomes. Since both variables were central to all NZ Police hypotheses, it was important to confirm the robustness of each measure prior to progressing with more specific types of analyses. The relationship between each T1 variable and role breadth self-efficacy and proactive behaviour at T2 was investigated using a Pearson's product-moment correlation coefficient.

Table 18 shows that for the NZ Police, three weak relationships existed between job interest, proactive personality, and leader-member exchange at T1 and proactive behaviour at T2 (i.e., rs = .18 to .21, ps < .01). Proactive behaviour also had a positive but weak relationship with group fit at T3 (i.e., r = .23, p < .01). In contrast, the role breadth self-efficacy variable had a weak to medium relationship with four T1 predictor variables (i.e., rs = .22 to .36, ps < .01) and each T3 proximal criterion (i.e., rs = .24 to .45, ps < .01). A summary of item range, means, and standard deviations for each NZ Police variable is shown in Table 19.

Table 18

Correlation Analysis Between all Variables for the NZ Police

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1. Fluid intelligence	-																								
2. No. of jobs	.05	-																							
3. Prior work	-.01	.07	-																						
4. Job interest	-.04	-.04	.13*	-																					
5. Team support	-.02	-.01	.12*	.16**	-																				
6. Pro. personality	-.12*	.06	.12*	.20**	.16**	-																			
7. LMX	-.04	-.06	.08	.39**	.26**	.19**	-																		
8. P.Beh T1	-.03	.01	.06	.21**	.11*	.20**	.13*	-																	
9. P.Beh T2	.01	-.03	.01	.18**	.06	.18**	.21**	.58**	-																
10. P.Beh T3	-.02	.02	.02	.25**	.21**	.17**	.25**	.57**	.63**	-															
11. P.Beh T4	-.01	-.03	.04	.21**	.07	.20**	.17**	.40**	.40**	.37**	-														
12. P.Beh T5	.01	.03	-.02	.15*	.09	.23**	.21**	.47**	.40**	.41**	.56**	-													
13. RBSE T1	.05	-.02	.16**	.25**	.27**	.24**	.18**	.05	.05	.12*	.08	.06	-												
14. RBSE T2	.01	.06	.09	.30**	.35**	.22**	.36**	-.02	.04	.12*	.06	.05	.59**	-											
15. RBSE T3	-.00	-.02	.11	.30**	.35**	.18**	.31**	.08	.14**	.22**	.09	.10	.52**	.64**	-										
16. RBSE T4	.00	-.04	.03	.23**	.31**	.19**	.31**	-.02	.01	.20	.07	.01	.47**	.54**	.62**	-									
17. RBSE T5	-.03	.09	.03	.27**	.25**	.21**	.39**	.11	.20**	.18**	.16*	.17*	.31**	.48**	.46**	.57**	-								
18. Mger T1	.03	.00	.13*	.06	.02	-.01	.06	.03	-.01	-.03	-.08	-.03	.07	.02	.13*	.07	-.01	-							
19. Mger T2	.02	-.02	.11*	.12*	-.02	.02	.19**	-.02	.03	.01	-.00	.03	.04	.03	.05	.02	.09	.53**	-						
20. Mger T3	.07	.01	.13*	.10	-.20	-.04	.25**	-.20	.01	-.07	-.04	.01	.12*	.09	.11	.08	.07	.55**	.71**	-					
21. Task mastery	-.03	-.05	.14*	.33**	.24**	.20**	.34**	.04	.09	.17**	.04	-.04	.32**	.45**	.57**	.43**	.38**	.12*	.12*	.15**	-				
22. Group fit	-.09	-.09	.05	.22**	.12*	.07	.30**	.14**	.23**	.33**	.13*	.08	.15**	.25**	.38**	.22**	.20**	-.00	.04	.03	.47**	-			
23. Role clarity	-.04	-.08	.10	.28**	.20**	.12*	.34**	.12*	.06	.19**	.13*	.02	.19**	.24**	.41**	.35**	.30**	.11*	.04	.05	.52**	.48**	-		
24. Performance	-.06	-.02	-.08	.12	.19**	.16*	.19**	.07	.04	.12	.01	.05	.25**	.26**	.28**	.22**	.37**	-.12	-.09	.01	.25**	.15*	.15*	-	
25. Commitment	-.11	.01	-.03	.17**	.07	.14*	.26**	.08	.00	.11	.14*	.16*	.20	.11	.19**	.26**	.30**	.03	.02	.07	.18**	.15*	.20**	.07	-

Note. LMX = Leader-member exchange; P.Beh T1 to T5 = Proactive behaviour 7-weeks to 15-months; RBSE T1 to T5 = role breadth self-efficacy 7-weeks to 15-months; Mger T1 to T3 = Proactive behaviour instructor rating 7-weeks to 18-weeks
*p < .05 **p < .01

Table 19

Item Range, Means, and Standard Deviations for Each NZ Police Variable

Variables	Range	NZ Police N	NZ Police M	NZ Police SD
1. Fluid intelligence	1-25	344	19.15	3.56
2. No. of jobs	1-6	384	2.60	1.34
3. Prior work	1-5	376	3.37	.98
4. Job interest	1-5	384	3.96	.64
5. Team support	1-5	384	4.01	.69
6. Pro. personality	1-5	384	3.88	.41
7. LMX	1-5	366	4.24	.45
8. P.Beh T1	1-7	384	5.20	.83
9. P.Beh T2	1-7	366	5.17	.82
10. P.Beh T3	1-7	356	5.26	.86
11. P.Beh T4	1-7	320	5.59	.78
12. P.Beh T5	1-7	241	5.02	.89
13. RBSE T1	1-5	384	3.40	.61
14. RBSE T2	1-5	366	3.48	.52
15. RBSE T3	1-5	356	3.73	.53
16. RBSE T4	1-5	320	3.63	.55
17. RBSE T5	1-5	241	3.88	.46
18. Mger T1	1-7	364	5.17	1.25
19. Mger T2	1-7	380	5.12	1.27
20. Mger T3	1-7	335	4.96	1.40
21. Task mastery	1-5	356	3.76	.49
22. Group fit	1-5	356	4.03	.53
23. Role clarity	1-5	356	4.12	.51
24. Performance	1-5	241	3.34	.61
25. Commitment	1-5	241	3.95	.54

Note. *N* = total number of participants; *M* = mean; *SD* = standard deviation
*$p < .05$ **$p < .01$

While both sets of results were modest, T1 variables were less predictive of police proactive behaviour at T2 than role breadth self-efficacy. This was the first piece of evidence to suggest that Model B (Figure 2) lacked feasibility as a research proposition. The second concern with respect to proactive behaviour revolved around its low and unstable Cronbach's alpha at T1 and T2 (i.e., .61 to .68) for the NZ Police sample. So as not to misrepresent model-data goodness-of-fit, advanced types of analysis including SEM requires a Cronbach's alpha of at least .70 (Garson, 2008). As a consequence of these findings, only the hypotheses associated with Model A (Figure 1) were tested with the NZ Police. This narrowing of focus acknowledges the importance of role breadth

self-efficacy in supporting newcomer adjustment, and its contribution to remaining successful in today's highly competitive world.

In summary, Model A (Figure 1) hypothesised that individual and group-level factors would positively predict role breadth self-efficacy among police recruits (Hypotheses 1 to 6). Training recruits in a repertoire of proactive behaviours was expected to moderate the relationship between role breadth self-efficacy and future proaction. In other words, self-efficacy was expected to predict future proaction when training was present (Hypothesis 11). Police recruits with the confidence to carry out a broader and more proactive role were predicted to have higher task mastery, group fit, and role clarity (Hypotheses 12 to 14). In turn, these proximal goals were hypothesised to predict more distal goals, namely individual performance and organisational commitment (Hypotheses 15 to 17). The longitudinal pattern of proactive behaviour for police newcomers (Hypotheses 7) was also expected to be influenced by external socialising influences and be observable to others (Hypotheses 9). In the next part of this chapter, the results from testing each hypothesis is presented for the NZ Police (Study 1).

NZ Police Hypothesis Testing Part 1

A number of hypotheses were proposed in the present study regarding the prediction of role breadth self-efficacy and its link to various outcomes of adjustment for NZ Police recruits. This section exclusively deals with those hypotheses that lent themselves to SPSS (2005) analysis (i.e., hypotheses 1, 2, 7, 9, 11, 17). Hypotheses that lent themselves to SEM (i.e., hypotheses 3 to 6; 12 to 16) are presented separately, but immediately after SPSS output.

Prior work experience and future role breadth self-efficacy

Hypothesis 1 stated that both the quality and quantity of prior work experience at T1 would predict role breadth self-efficacy at T2. In particular, it was hypothesised that newcomers with job-relevant (i.e., quality) experiences across a number of jobs (i.e., quantity) would judge themselves more capable of assuming a broader, more proactive role than newcomers without multiple, job-relevant work experiences.

To test this hypothesis, a set of Pearson's product-moment correlations were conducted which took into account both the prior work experience and number of jobs previously held by each recruit. Results showed that prior work experience in one or two jobs had an insignificant relationship with role breadth self-efficacy at T2 ($rs = -.03$ to .08, $ps = .41$ to .81), while prior experience in three jobs had a small, positive relationship with role breadth self-efficacy at T2 ($r = .23$, $p < .05$), and prior experience in four jobs had a negative correlation with role breadth self-efficacy at T2 ($r = -.39$, $p < .05$).

These results provide support for Hypothesis 1, and suggest that there is an optimal number of jobs that, together with job quality will dictate future role breadth self-efficacy beliefs for police recruits. Whereas prior work experience in three jobs had a significant impact on self-efficacy at T2, prior work in two or less jobs had no impact, and more than three jobs had a negative impact on self-efficacy.

Fluid intelligence and future role breadth self-efficacy

Hypothesis 2 stated that fluid intelligence measured pre-T1 would positively predict future role breadth self-efficacy among NZ Police newcomers. A Pearson's product-moment correlation found there was a non-significant relationship between fluid intelligence and recruit self-efficacy at T2 ($r = .01$, $p = .92$). On the basis of these results, Hypothesis 2 was not supported by NZ Police recruits, since fluid intelligence did not predict future perceptions of competence inside this group.

Proactive behaviour across time

Hypothesis 7 proposed that for the period police recruits were at College (i.e., between T1 and T3) individuals would report a stable pattern of proactive behaviour, with those recruits who had been trained in proactive tactics demonstrating the highest overall level of proaction. It was also hypothesised that by the time individuals were posted to front-line field work (i.e., T4) proaction would increase. The greatest level of proaction was again hypothesised to be exhibited by recruits who had received proactive training.

A 3 (time: T1, T2, T3) by 4 (intervention: proactive training, leader-member exchange, placebo, control) repeated measures ANOVA was conducted to compare police recruit ratings of proactive behaviour between T1 and T3. Results showed a non-significant main effect for time; $F(2, 678) = 2.40$, $p = .09$, partial $\eta^2 = .01$, and a significant interaction effect for time by intervention; $F(6, 678) = 5.19$, $p < .01$, partial $\eta^2 = .04$. Between subject analysis showed that the main effect for intervention was non-significant, suggesting that the change in recruit proaction between T1 and T3 could not be attributed to intervention group; $F(3, 339) = .52$, $p = .67$, partial $\eta^2 = .01$.

On leaving Police College, a single paired-sample t-test revealed that police recruits did significantly increase their proactive behaviour from T3 ($M = 31.69$, $SD = 13.30$) to T4 ($M = 40.19$, $SD = 14.66$), $t(302) = -9.37$, $p < .01$). This was followed up by a single univariate test with Bonferroni corrections at T4 to determine if any difference existed in the proaction of each recruit based on intervention group. Results showed that despite a visual gap in the proactive behaviour of recruits at T4, this difference was non-significant; $F(3, 316) = .52$, $p = .67$.

On the basis of these results, Hypothesis 7 was partially supported; since NZ Police recruits did demonstrate a stable pattern of proaction while at Police College and significantly increased their proactive behaviour once in the field. The pattern of proactive behaviour among NZ Police recruits is shown in Figure 3. This graph depicts a slight decline in proaction between T1 and T3 and a sharp increase at T4. No significant difference was found however between the proactive behaviour of recruits who attended training versus those who did not, either during their tenure at College, or while in the field.
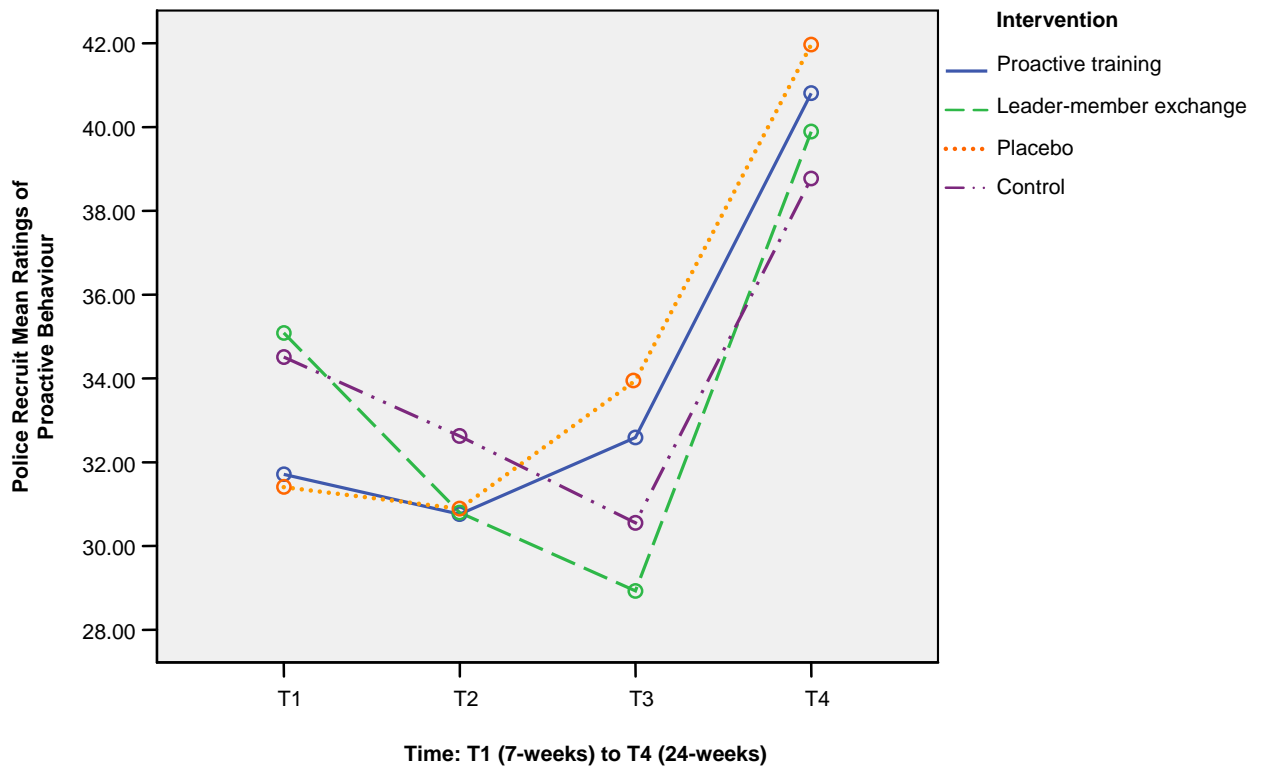
Figure 3. Mean ratings of proactive behaviour for NZ Police recruits between T1 (7-weeks) and T4 (24-weeks).

Instructor's observation of proactive behaviour

Hypothesis 9 proposed that for the duration that recruits were at Police College (i.e., between T1 and T3), police instructors would observe a stable pattern of recruit proaction. It was also proposed that the highest level of information-seeking, feedback-seeking, and listening behaviour would be visible by recruits trained in proactive tactics when compared to a leader-member exchange intervention, placebo group, and control.

A 3 (time: T1, T2, T3) by 4 (intervention: proactive training, leader-member exchange, placebo, control) repeated measures ANOVA was undertaken to verify the extent to which instructors observed a difference in the proactive behaviour of police recruits from different intervention groups. Results showed a main effect for time; $F(2, 620) = 3.27$, $p < .05$, partial $\eta^2 = .01$ and a significant interaction effect for time by

intervention; $F(6, 620) = 13.56$, $p < .01$, partial $\eta^2 = .12$. Between-subject analysis also revealed that the main effect for intervention was significant; $F(3, 310) = 15.39$, $p < .01$, partial $\eta^2 = .13$. That is, police instructors did observe a difference in the proactive behaviour of recruits from different intervention groups across time.

To explore these differences further, a series of univariate tests with Bonferroni corrections were conducted. This analysis showed that while the group trained in proactive tactics was rated by instructors as exhibiting the highest level of proaction at T1 ($M = 32.95$, $SD = 22.22$), these ratings did not significantly differ to either the control or placebo groups, but were significantly higher than the leader-member exchange group ($M = 17.56$, $SD = 12.35$). By T3, instructors observed significantly less proaction from the training group ($M = 29.41$, $SD = 22.26$) when compared to the placebo group ($M = 37.96$, $SD = 25.67$), but more proaction from the training group than either the leader-member exchange ($M = 15.37$, $SD = 15.24$) or control group ($M = 18.96$, $SD = 18.88$). Visually, Figure 4 shows that it was the placebo group who were observed to display the greatest amount of proactive behaviour during their tenure at Police College, with the sharpest increase occurring between T1 and T2 post-appointment.

In summary, police instructors did not observe any stability in the pattern of proaction across time among intervention groups, nor did they observe an elevated level of proactive behaviour among recruits who participated in training. The pattern of proactive behaviour observed by police instructors is shown in Figure 4. Thus, even though police recruits reported their own proaction to be stable for the duration of their time at Police College, this was not observable to police instructors. On this basis of these results, Hypothesis 9 was not supported.
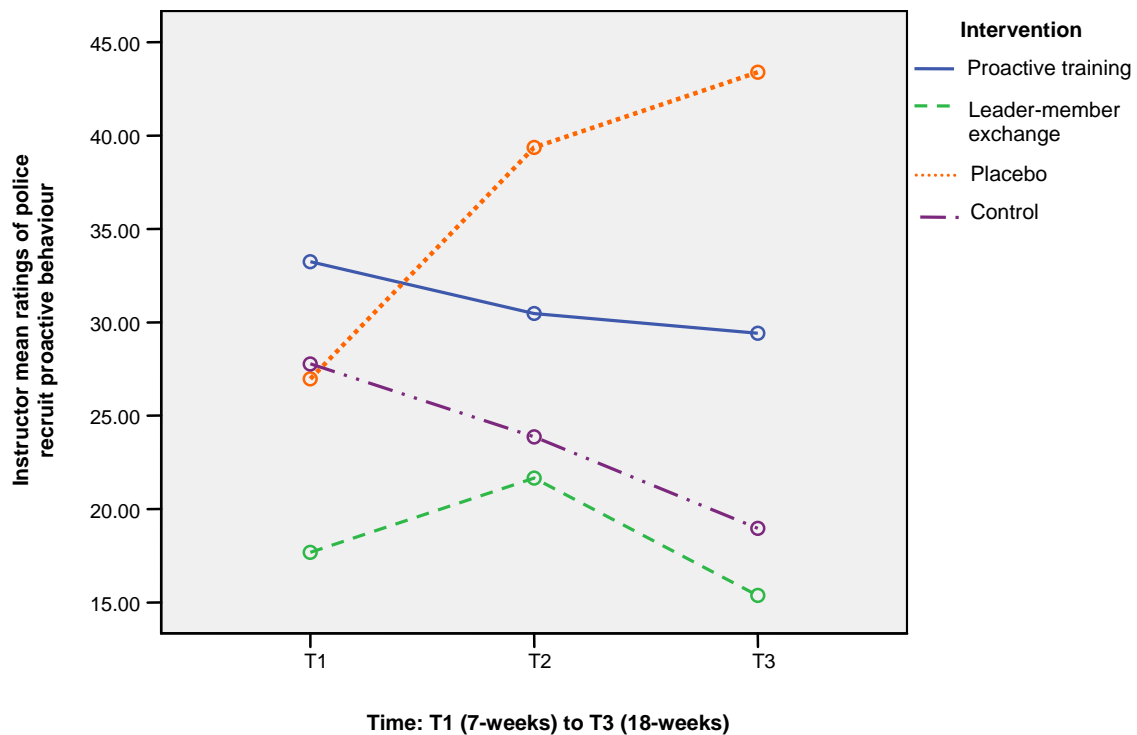
Figure 4. Instructor mean ratings of NZ Police recruit proactive behaviour between T1 (7-weeks) and T3 (18-weeks).

Proactive training as a moderator

Hypothesis 11 proposed that training newcomers in a range of proactive tactics would moderate the relationship between role breadth self-efficacy and future proactive behaviour. In particular, it was proposed that self-efficacy would more readily predict future proaction when training was present.

Because proactive training was delivered over time, it made sense to test the link between role breadth self-efficacy and proactive behaviour at the conclusion of police training (i.e., at T3 or 18-weeks post-appointment). Testing this hypothesis only involved recruits who were exposed to proactive training (i.e., the intervention group), and individuals who were not (i.e., the control). A new bivariate intervention variable which recognised each individual's unique coding was created and labeled 'Group'. A new interaction variable (i.e., RBSEGrp) was also established which combined recruits role breadth self-efficacy scores at T3 with their intervention group.

To test this hypothesis, a hierarchical regression was undertaken with role breadth self-efficacy at T3 (RBSE), Group, and RBSEGrp as the independent variables and proactive behaviour at T4 as the dependent variable. RBSE was entered in the first step of the hierarchical regression as a main effect, together with the intervention variable Group, while the interaction variable RBSEGrp was entered in the second step. Results are presented in Table 20.

In the first step, neither role breadth self-efficacy at T3 nor one's intervention group had any significant impact, explaining only 1% of the variance in proactive behaviour at T4. In step two, RBSEGrp significantly predicted and additional 8% of the variance in proactive behaviour at T4; thereby suggesting that proactive training did moderate the relationship between role breadth self-efficacy at T3 and proactive behaviour at T4 among police recruits; $F(3, 170) = 5.77$, $p < .01$.

Table 20
Summary of Hierarchical Regression Analysis Predicting the Moderating Role of Training on NZ Police Recruit Proactive Behaviour

Variable	B	SE B	β	R^2	$\triangle R^2$	F	Sig. *F*
Step 1							
RBSE	.27	.31	.07				
Group	2.08	2.30	.07	.01	1%	1.05	.35
Step 2							
RBSEGrp	2.45	.63	2.29**	.09	8%	5.77	.00

Note. RBSE = NZ Police recruit role breadth self-efficacy ratings at T3; Group = intervention group; RBSEGrp = role breadth self-efficacy scores at T3 x intervention
**$p < .01$

A Pearson's product-moment correlation was also used to test whether or not the relationship between role breadth self-efficacy and proactive behaviour varied systematically for recruits who did not receive training. Results showed a non-significant relationship between role breadth self-efficacy and proactive behaviour for control group members ($r = -.073$, $p = .55$). A second Pearson's product-moment correlation between role-breadth self-efficacy and proactive behaviour again showed a moderately strong relationship for the training group ($r = .323$, $p = <.01$).

The computer programme 'ModGraph' (Jose, 2008) was used to graphically display the relationship between role breadth self-efficacy at T3 and proactive behaviour at T4 with training as the moderator. This relationship is graphically represented in Figure 5. Results show that among the group who participated in training, proactive behaviour was the most pronounced for newcomers with an elevated level of role breadth self-efficacy. This result suggests that there is a relationship between role breadth self-efficacy and proaction that is supported by training, and that training will be most potent for newcomers who have a positive perception of capability. Without training, role breadth self-efficacy had a non-significant relationship with future proaction.

These results support Hypothesis 11, since training did moderate the relationship between role breadth self-efficacy and proactive behaviour for police recruits.
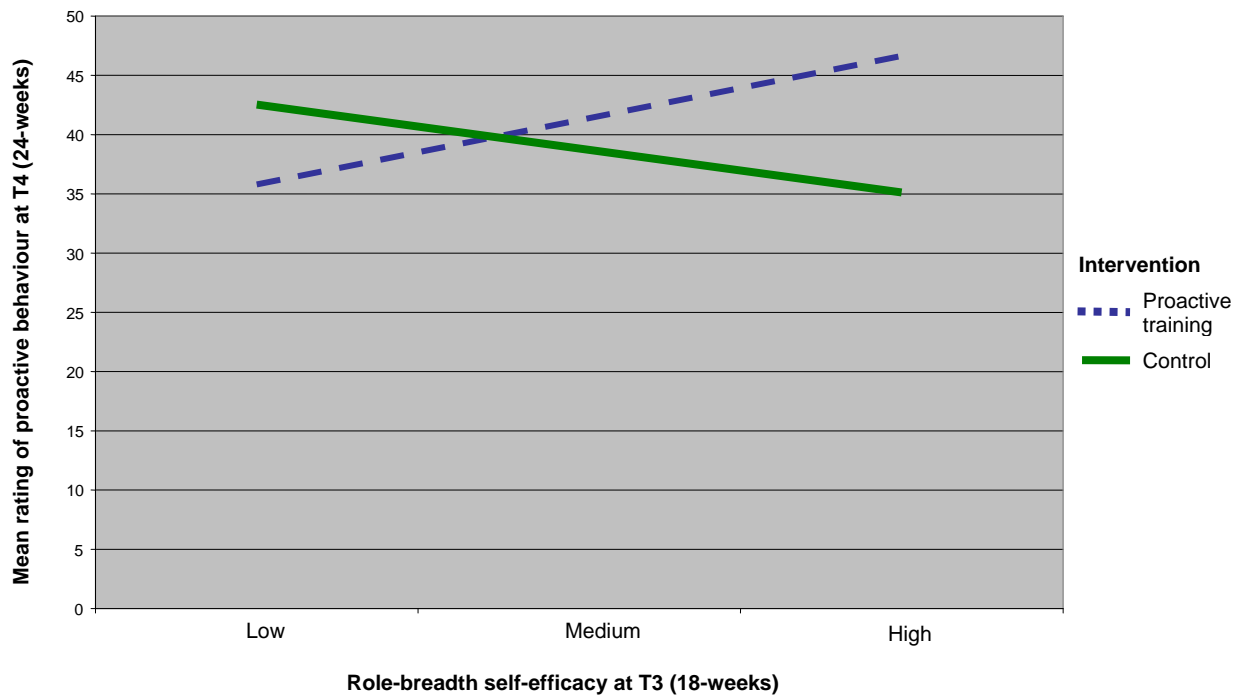
Figure 5[1]. The impact of training as a moderator between role breadth self-efficacy at T3 (18-weeks) and proactive behaviour at T4 (24-weeks).

Group fit, future performance and organisational commitment

Hypothesis 17 stated that group fit would positively predict future ratings of performance and organisational commitment among NZ Police recruits. Using a Pearson's product-moment correlation, group fit at T3 was found to have a weak but positive relationship with self-ratings of performance ($r = .15, p < .05$) and organisational commitment ($r = .15, p < .05$) 15-months post-appointment. These results support Hypothesis 17 since successful group adjustment did predict future self-ratings of performance and long-term intentions to stay with the organisation.

Testing the NZ Police Hypothesised Model

For the NZ Police group, nine hypotheses lent themselves to simultaneous analysis via structural modeling. In particular, having an interest in one's job, a proactive personality, support from more experienced team members, and a positive relationship with one's instructor were hypothesised to predict police recruit role breadth self-efficacy (Hypotheses 3 to 6). With confidence in one's ability to succeed, a recruit was predicted to have greater task mastery, group adjustment, and role clarity (Hypotheses 12 to 14). In turn, these proximal outcomes were hypothesised to positively predict future self-ratings of performance and organisational commitment (Hypotheses 15 to 17). In line with previous SEM research, results in this section are reported to three decimal places.

Preliminary Analysis

Prior to commencing the model building process, a review of responding revealed that 41 police recruits had at least one missing questionnaire between T1 and T3. Because missing data can bias the conclusions drawn (Byrne, 2001), these participants were removed from all subsequent analysis by way of listwise deletion. With the removal of missing data, a total of 343 recruits remained for step 1 of structural modeling.

Preliminary checks were also carried out to reconfirm data normality and the absence of multicollinearity with a reduced dataset. In line with Fife-Schaw (2007), an absolute skewness or kurtosis value above two was taken as evidence of non-normality for the police dataset. With respect to multicollinearity, bivariate correlations greater than $r = .85$ signal a potential problem and may inhibit certain statistical operations from being performed (Kline, 2005). A review of the police dataset found no evidence of extreme outliers, nor any scale measure correlating greater than $r = .513$.

Sample size.

With respect to sample size, there is little consensus in the literature as to what constitutes an adequate number for conducting structural modeling. One rule of thumb is that sample size should be at least 50 more than 8 times the number of variables in the model (Garson, 2008). Since the full police model will all variables occurred at T5 (i.e., 10 observed variables and their unobserved measurement error), the minimum acceptable number of cases for a valid output was 210 (i.e., 20 x 8 + 50). In line with Kline (2005), the police dataset of 343 recruits was 'large' and comfortably within the 250 to 500 band recommended by Schumacker and Lomax (2004).

NZ Police Measurement and Structural Modeling

A two-step approach was adopted for data modeling with the NZ Police that included testing the measurement model and building a structural model. This approach has support as a way of specifying the relationship between observed indicators and latent variables before testing the structural model (Garson, 2008; Kline, 2005; Weston & Gore, 2006). Consistent with standard practice, the measurement model for the NZ Police was tested for appropriate fit using confirmatory factor analysis (CFA) and by using the maximum likelihood estimation procedure.

The Measurement Model

The police dataset included four distinct measurement sub-models as shown in Figure 6. In line with SEM protocol, the path from each latent factor to its first indicator was routinely set to 1 to set the metric scale for each variable (Kline, 2005). Due to insufficient recruit data, the prior work variable ($n = 92$) was excluded from the police measurement model. Even though this variable had a positive relationship with role breadth self-efficacy, its inclusion in the measurement model would have reduced the sample size to an unacceptable level for structural modeling (Garson, 2008). The fluid intelligence variable was also excluded since its hypothesised relationship with role breadth self-efficacy was not supported.
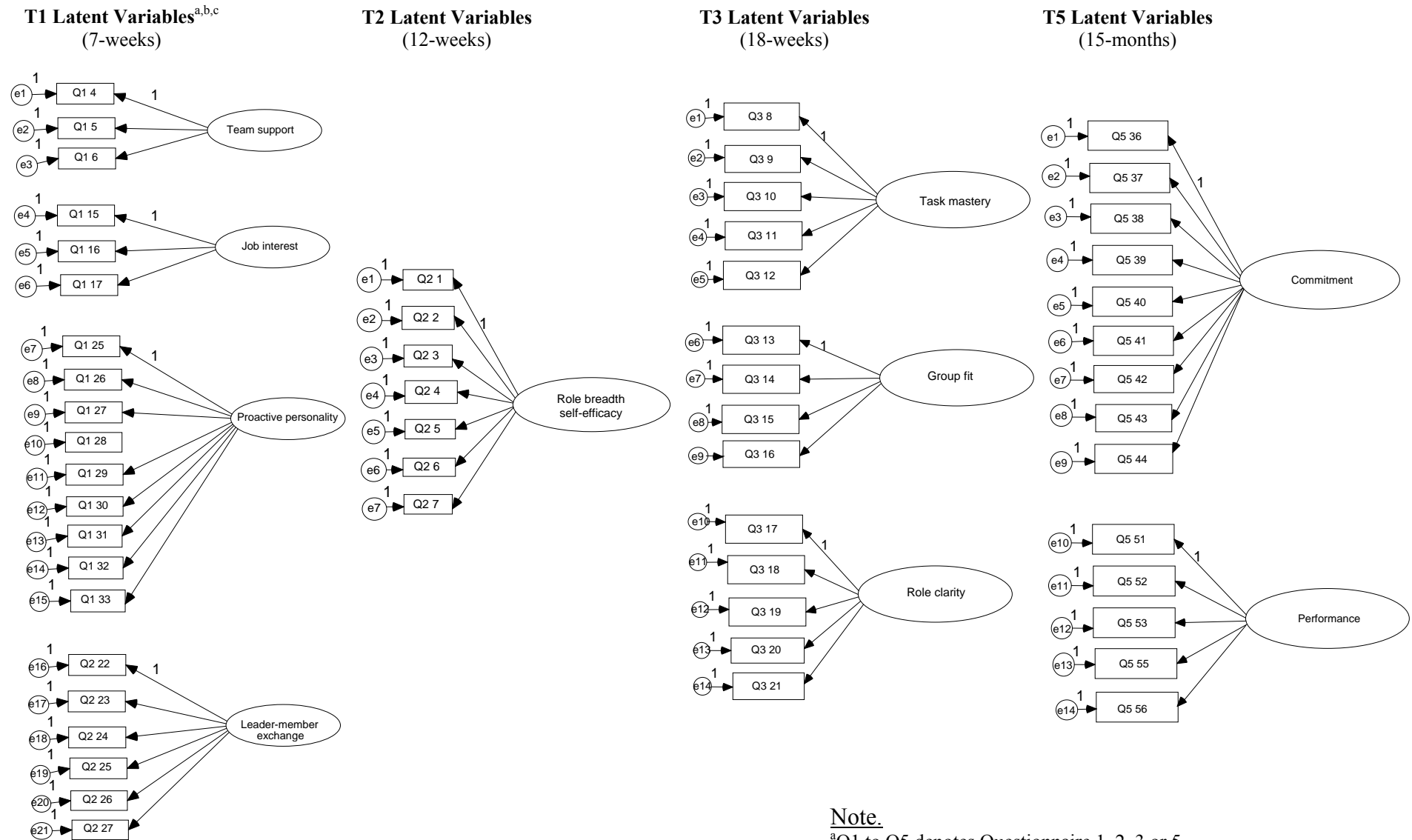
Figure 6. NZ Police measurement sub-models between T1 (7-weeks) and T5 (15-months).

Note.
[a]Q1 to Q5 denotes Questionnaire 1, 2, 3 or 5
[b]The number following Q1 to Q5 reference denotes the questionnaire item
[c]e1 to e21 denotes the measurement error associated with each observed variable

Model-fit and interpretation.

Table 21 presents a summary of all standardised parameter estimates, their associated standard error (*SE*), and critical ratios (*CR*) for each latent variable. Parameter estimates showed that all indicator items loaded on each latent variable as expected, with estimates in the range of .429 to .933. All critical ratios (i.e., the estimate divided by its standard error) were ≥ 1.96, indicating that the covariance between each latent variable and indicator items was significantly different from zero with $p < .001$. All standard errors were neither excessively large nor small.

Goodness-of-fit statistics.

Having estimated the model parameters for each measurement sub-model, data-fit was further evaluated via various goodness-of-fit statistics. AMOS (1997) presents some 25 different fit indexes, the choice of which is a matter of dispute among researchers. One of the most popular is the chi-square (χ^2). When divided by the degrees of freedom (*df*) a ratio of less than 3 is considered appropriate (Kline, 2005), while a ratio of less than 2 is indicative of a superior fit (Ullman 1996).

The goodness-of-fit index (GFI) and adjusted goodness-of-fit index (AGFI) are both absolute indexes of fit since they compare the hypothesised model with no model at all (Byrne, 2001). In both instances, values above 0.90 indicate adequate fit (Kline, 2005); however some researchers now recommend using .95 as the cut-off (Schumacker & Lomax, 2004). While GFI and AGFI are popular measures of fit, both are sensitive to sample size and tend to be larger as sample size increases (Garson, 2008). AGFI may also underestimate fit for small samples. In reality, this should not occur, since it would suggest that a model was a worse fit to data than no model at all (Byrne, 2001).

Table 21

Summary of Standardised Parameter Estimates, SEs, and CRs for each NZ Police Latent Variable

	T1 Latent variables					**T2 Latent variables**					**T3 Latent variables**					**T5 Latent variables**			
Variable	Item	Estimate	*SE*	*CR*	Variable	Item	Estimate	*SE*	*CR*	Variable	Item	Estimate	*SE*	*CR*	Variable	Item	Estimate	*SE*	*CR*
Team support	Q1 4	.826			**RBSE**	Q2 1	.511			**Task mastery**	Q3 8	.743			**Commitment**	Q5 36	.679		
	Q1 5	.933	.053	20.994		Q2 2	.578	.144	7.084		Q3 9	.632	.114	10.363		Q5 37	.750	.125	9.957
	Q1 6	.890	.052	20.222		Q2 3	.628	.114	7.390		Q3 10	.731	.091	11.732		Q5 38	.560	.155	7.649
Job interest	Q1 15	.761				Q2 4	.563	.113	6.977		Q3 11	.702	.081	11.373		Q5 39	.608	.092	8.251
	Q1 16	.761	.116	8.189		Q2 5	.633	.135	7.420		Q3 12	.562	.091	9.286		Q5 40	.671	.106	9.022
	Q1 17	.534	.082	7.821		Q2 6	.483	.104	6.357	**Group fit**	Q3 13	.700				Q5 41	.789	.114	10.391
Proactive personality	Q1 25	.514				Q2 7	.482	.128	6.344		Q3 14	.777	.097	12.019		Q5 42	.737	.117	9.807
	Q1 26	.557	.148	7.022							Q3 15	.807	.093	12.236		Q5 43	.494	.116	6.798
	Q1 27	.481	.119	6.410							Q3 16	.625	.085	10.085		Q5 44	.720	.134	9.604
	Q1 28	.429	.131	5.922						**Role clarity**	Q3 17	.608			**Performance**	Q5 51	.680		
	Q1 29	.556	.145	7.017							Q3 18	.608	.092	9.045		Q5 52	.687	.113	9.041
	Q1 30	.629	.159	7.506							Q3 19	.723	.134	10.226		Q5 53	.707	.096	9.271
	Q1 31	.526	.147	6.785							Q3 20	.842	.136	11.036		Q5 55	.843	.117	10.623
	Q1 32	.458	.138	6.201							Q3 21	.686	.117	9.872		Q5 56	.780	.115	10.061
	Q1 33	.491	.143	6.497															
LMX	Q2 22	.616																	
	Q2 23	.629	.109	8.938															
	Q2 24	.551	.119	8.111															
	Q2 25	.693	.116	9.535															
	Q2 26	.622	.097	8.875															
	Q2 27	.676	.110	9.386															

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy; Estimate = estimated value; *SE* = standard error, *CR* = critical ratio

Another frequently quoted absolute fit index is the standardised root mean square residual (sRMR), which is a measure of how much difference exists between the observed data and the model. The smaller the sRMR, the better the model-fit, with a sRMR of zero indicative of a perfect fit. More realistically, a value of less than .08 is acceptable, while a value less than .05 is ideal (Kline, 2005). Once again, sample size can influence this fit index, which tends to be lower if the sample size is large or the model is complex (Garson, 2008).

The root mean square error of approximation (RMSEA) is one of the most informative criteria in SEM since its formula includes a built-in correction for model complexity (Kline, 2005). The RMSEA, much like the sRMR, is a 'badness of fit' index in that a value of zero indicates the best fit and higher values indicate worse fit. A rule of thumb is that an RMSEA less than .05 is indicative of a good fit; values between .05 and .08 suggest an acceptable fit, and values between .08 and .10 suggest a moderate fit (Kline, 2005). As an ideal, Hu and Bentler (1999) suggest .06 as an ideal cut score, yet caution that RMSEA will overestimate goodness-of-fit for smaller samples. Evaluating model-fit using RMSEA estimates is enhanced in AMOS (1997) by the addition of a 90% confidence interval around the RMSEA value. In practice, a small RMSEA with a wide confidence interval suggests poor model-fit, whereas the same RMSEA with a narrow confidence interval suggests good model-fit (MacCallum, Browne, & Sugawara, 1996). Confidence intervals can again be influenced by sample size and model complexity; with a large sample size required to produce a narrow confidence interval when there is a large number of estimated parameters (MacCallum et al., 1996).

While there are plenty of 'rules of thumb' to support the rejection or acceptance of a model, Bollen (1989) observes that these cut-offs are arbitrary. Of perhaps more relevance is the level of data-fit between one model and other prior models in a given area of interest. For example, a GFI of .85 may represent progress in a field if the best prior model had a fit of .70. It is also important to acknowledge that a good fit is not, in itself, indicative of a strong relationship (Garson, 2008). Indeed, with low to moderate correlations among measures (as is the case with the NZ Police and graduate datasets), the easier it is becomes to find a 'good' fit. In such instances, the significance of parameter estimates must be considered, for a model that fits the data quite well but has

few significant parameters is meaningless (Garson, 2008; Weston & Gore, 2006). In summing up these recommendations, Lei and Wu (2007) suggest the simultaneous consideration of multiple fit statistics since some work better than others in different circumstances.

Testing the Goodness-of-Fit for NZ Police Latent Variables

Table 22 presents a summary of six goodness-of-fit statistics for eight of the latent variables in the police dataset. With the exception of task mastery, there was evidence of misfit across all latent variables, suggesting that some modification (respecification) was required. In the case of job interest and team support, fit statistics were not obtained, since each measure was fully saturated (i.e., there were as many parameters to be estimated as there were elements in the covariance matrix, such that $\chi^2 = 0$ and $df = 0$). Having said this, the Cronbach's alpha for both the job interest ($\alpha = .74$) and team support ($\alpha = .90$) variables did have sufficient homogeneity and item inter-correlation to support their inclusion in structural model building. Cronbach's alphas are a viable alternative to goodness-of-fit statistics in the case of measure saturation (U. Daellenbach, personal communication, July 31, 2008).

Table 22
Goodness-of-Fit Statistics for Each NZ Police Latent Variable

	χ^2	*df*	χ^2/df	sRMR	GFI	AGFI	RMSEA	Lo 90	Hi 90
Proactive personality	117.1	27	4.337	.064	.928	.880	.099	.081	.117
LMX	75.8	9	8.422	.064	.927	.830	.147	.118	.179
RBSE	89.8	14	6.414	.068	.927	.855	.126	.102	.151
Task mastery	9.9	5	1.98	.024	.988	.965	.054	.000	.103
Group fit	46.7	2	23.35	.061	.933	.663	.256	.195	.322
Role clarity	76.5	5	15.3	.071	.912	.737	.204	.165	.246
Commitment	114.7	27	4.248	.057	.899	.831	.120	.098	.144
Performance	30.9	5	6.18	.044	.948	.844	.152	.103	.206

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy

Modification took place with all latent variables in the police model with the exception of task mastery in order to achieve better model-data fit. In the case of role clarity, the removal of one item contributed to an unacceptably high level of kurtosis, and meant the removal of 2 cases from all subsequent analyses. No other evidence of non-normality existed with modified variables, and all Cronbach's alphas were in excess of .70. Please see Appendix B for an example of the specific steps undertaken to support model modification.

Table 23 presents a summary of fit statistics for each latent variable to which modification took place. Fit statistics were not obtained for either the role clarity or group fit variables since each measure was fully saturated post-modification (i.e., $\chi^2 = 0$, $df = 0$). However, both role clarity ($\alpha = .73$) and group fit ($\alpha = .77$) did have sufficient homogeneity and item inter-correlation to support their inclusion in structural model building. Without exception, each respecified latent variable adequately met goodness-of-fit criteria.

Table 23
Goodness-of-Fit Statistics for NZ Police Latent Variables Post-Modification

	χ^2	df	χ^2/df	sRMR	GFI	AGFI	RMSEA	Lo 90	Hi 90
Proactive personality	17.4	9	1.933	.035	.984	.962	.052	.009	.089
LMX	1.0	2	0.5	.011	.998	.992	.000	.000	.089
RBSE	6.0	5	1.2	.023	.993	.979	.024	.000	.082
Commitment	11.9	9	1.322	.028	.983	.960	.038	.000	.090
Performance[a]	2.5	2	1.25	.018	.994	.972	.035	.000	.142

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy
[a]Only the second 'tactical' performance factor was used to support SEM since this variable best captured the proactive, self-starting behaviours Parker (1998, 2000) identified as being critical to job success.

T1 Latent Variables[a,b,c]
(7-weeks)

T3 Latent Variables
(18-weeks)

T5 Latent Variables
(15-months)

e1 → Q1 4 → .828
e2 → Q1 5 → .926***
e3 → Q1 6 → .897***

Team support

e4 → Q1 15 → .764
e5 → Q1 16 → .725***
e6 → Q1 17 → .572***

Job interest

e11 → Q1 25 → .586
e12 → Q1 26 → .593***
e13 → Q1 27 → .547***
e14 → Q1 29 → .467***
e15 → Q1 30 → .529***
e16 → Q1 31 → .532***

Proactive personality

e17 → Q2 23 → .608
e18 → Q2 24 → .569***
e19 → Q2 25 → .697***
e20 → Q2 27 → .625***

Leader-member exchange

.216***
.174***
.290***
.358***
.509***
.305***

e1 → Q3 8 → .752
e2 → Q3 9 → .641***
e3 → Q3 10 → .710***
e4 → Q3 11 → .694***
e5 → Q3 12 → .547***

Task mastery

e6 → Q3 14 → .805
e7 → Q3 15 → .815***
e8 → Q3 16 → .578***

Group fit

e9 → Q3 18 → .493
e10 → Q3 19 → .756***
e11 → Q3 20 → .875***

Role clarity

.544***
.427***
.462***

e1 → Q5 36 → .676
e2 → Q5 39 → .630***
e3 → Q5 40 → .724***
e4 → Q5 41 → .814***
e5 → Q5 42 → .661***
e6 → Q5 43 → .523***

Commitment

e7 → Q5 51 → .647
e8 → Q5 53 → .646***
e9 → Q5 55 → .899***
e10 → Q5 56 → .772***

Performance

.115***
.462***

Figure 7. Correlations between NZ Police latent variables at T1, T3, and T5.

Note.
[a]Q1, Q3, and Q5 denotes Questionnaire 1, 3, and 5.
[b]The number following Q1 to Q5 reference denotes the questionnaire item.
[c]e1 to e20 denotes the measurement error associated with each observed variable.
***p <.001

Before progressing to a full structural model, the strength of correlations between each latent variable at each discrete measurement time point was also explored. In line with empirical research, each variable was expected to show some relationship, but still remain independent. Figure 7 supports this proposition, with all correlations shown to be weak to moderate in strength (i.e., .12 to .54). These results suggest that while being related, team support, job interest, proactive personality, leader-member exchange, role breadth self-efficacy, task mastery, group fit, role clarity, organisational commitment, and performance were still independent constructs.

Building the Structural Model

Having confirmed that each measurement sub-model was operating adequately, it was then appropriate to develop a structural model to test the strength of each hypothesis. There is strong theoretical evidence for adopting a full latent modeling approach to SEM (MacCallum & Austin, 2000) over a manifest variable model. In a latent model, estimates can be made of the unique variance in each indicator, while estimates of the relationship between latent variables are not biased by the presence of indicator error (MacCallum & Austin, 2000).

In contrast, a manifest approach is where the measured variables are modeled only, without the underlying link to indicator items. While the police dataset was of a satisfactory size ($N = 343$) to undertake a latent model with sufficient power, the graduate dataset was not ($N = 125$). For consistency, both the police and graduate datasets were therefore assessed using a manifest approach. Manifest analysis is a common and valid SEM technique (Lei & Wu, 2007). Firstly, if measures are highly reliable (as is the case with both police and graduate datasets), the parameter estimates generated by a manifest model should approximate those generated by a latent model (Stephenson & Holbert, 2003). Secondly, since the correlation coefficients between predictor variables were also predominantly weak in magnitude for both datasets (see Tables 18 and 29) it was unlikely that the interaction between these variables would unduly influence causal relationships. Garson (2008) supports using SEM packages to conduct manifest modeling over traditional regression procedures since SEM offers the benefit of measuring model-fit and presents multiple options for model modification.

NZ Police Hypothesised Model Assessment

Figure 8 presents the NZ Police hypothesised, proximal model. This includes a path between each T1 variable and T3 outcome via role breadth self-efficacy at T2. Selected goodness-of-fit statistics suggest that this model did not fit the data well, with all values well outside the recommended range of acceptability: $\chi^2 = 288.5$, $df = 21$, $\chi^2/df = 13.738$, GFI = .789, AGFI = .638, sRMR = .174, RMSEA = .194, Lo90 = .174, Hi90 = .214.

T1 (7-weeks) **T2** (12-weeks) **T3** (18-weeks)
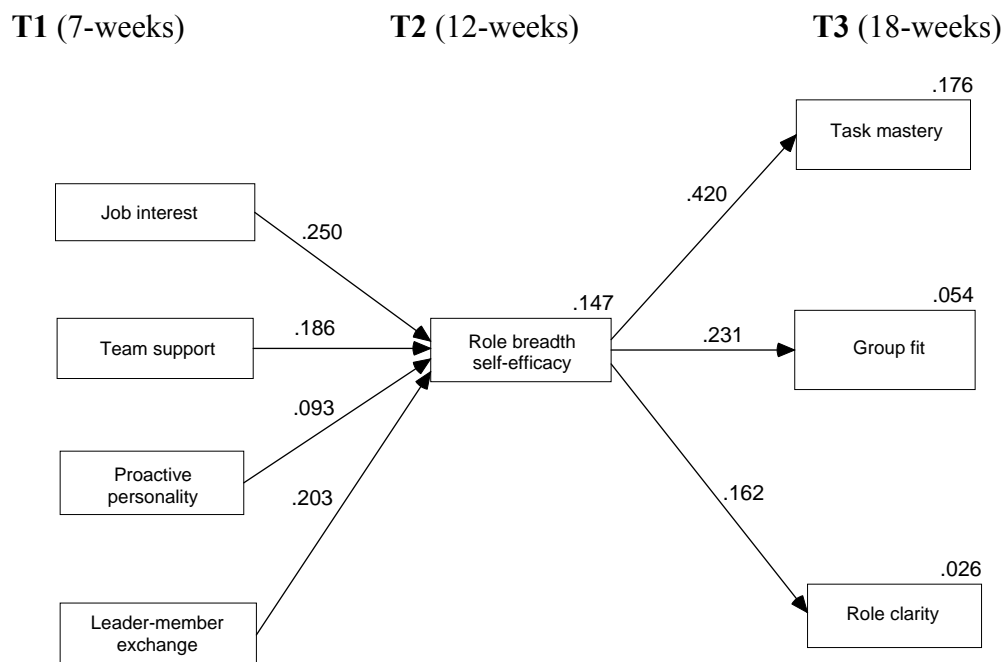
Figure 8. NZ Police hypothesised model.

With the exception of the path between proactive personality and role breadth self-efficacy ($\beta = .093$, $p = .063$), Figure 8 shows that all standardised estimates were significant in the hypothesised model (βs = .162 to .420, $ps < .001$ to $< .01$). Of all T1 variables, job interest was the best predictor of role breadth self-efficacy, and together with team support and leader-member exchange, explained about 15% of the variance in recruit self-efficacy. In turn, role breadth self-efficacy was a moderately strong predictor of task mastery at T3, yet was a weak predictor of group fit and role clarity.

The NZ Police Modified Model

A review of MIs showed 25 new paths could be taken into account to improve police model-data fit. In line with best practice (Byrne, 2001), each path was added one at a time, since MIs were expected to change with each step and alter the order in which any additional paths were added. Figure 9 shows that a total of 10 new paths were added to the hypothesised model, while five paths specified a priori were retained. A further two paths were dropped before arriving at the most theoretically justifiable, modified model that also had good data fit: $\chi^2 = 30.1$, $df = 13$, $\chi^2/df = 2.315$, GFI = .979, AGFI = .943, sRMR = .056, RMSEA = .062, Lo90 = .033, Hi90 = .092.

As shown in Figure 9, MIs identified multiple concurrent relationships at T1 and T3 that were not specified a priori. At T1, proactive personality was found to be a significant predictor of job interest ($\beta = .198$, $p < .001$), team support ($\beta = .148$, $p \leq .01$), and leader-member exchange ($\beta = .181$, $p < .001$). In addition, team support was found to predict leader-member exchange ($\beta = .271$, $p < .001$). At T3, role clarity and group fit significantly predicted task mastery ($\beta = .250$ and .262, $ps < .001$), while group fit predicted role clarity ($\beta = .333$, $p < .001$).
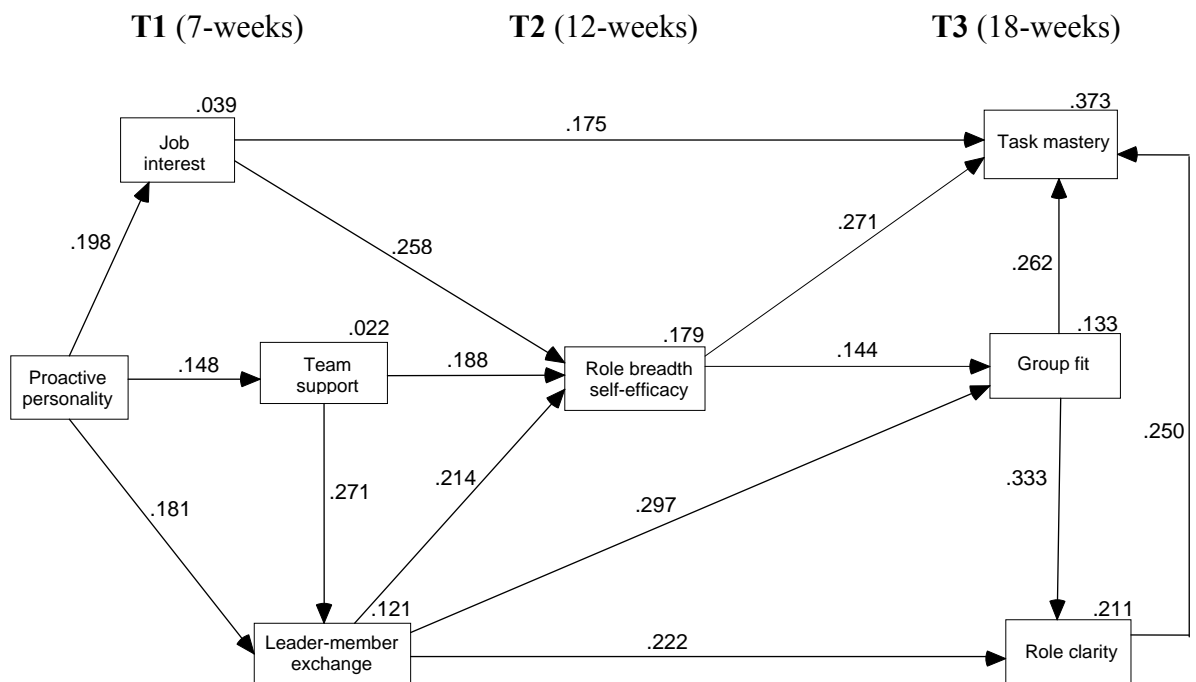
Figure 9. Output path diagram for the NZ Police modified model.

Three additional paths which existed across time also proved to be essential components of the modified model. In particular, job interest at T1 was a significant predictor of task mastery at T3 ($\beta = .175$, $p < .001$), while leader-member exchange at T1 was a significant predictor of role clarity ($\beta = .222$, $p < .001$) and group fit ($\beta = .297$, $p < .001$) at T3.

In the modified model, a number of relationships originally hypothesised were retained. In particular, job interest, team support, and leader-member exchange still emerged as significant predictors of role breadth self-efficacy. In turn, role breadth self-efficacy was still an important predictor of task mastery and group fit. The path between role breadth self-efficacy and role clarity was not significant, and was therefore removed from the model. Each of these relationships is discussed more fully in 'NZ Police Hypothesis Testing Part 2'.

At each step of the model building and model trimming process, fluctuations in standardised regression weights, phis, and error terms were assessed to ensure the absence of multicollinearity. The decision to add or remove paths was ultimately based on two pieces of information: (a) whether it made sound theoretical sense to alter the model, and (b) the achievement of a parsimonious model that still fitted the data reasonably well. At each step in the process, care was taken to avoid the addition or removal of paths that would lead to an 'over-fitted' model (Wheaton, 1987). According to Wheaton, model over-fit can result from the inclusion of additional parameters that are too fragile, lead to significantly inflated standard errors, or have limited meaning.

NZ Police Hypothesis Testing Part 2

Nine hypotheses in the present study lent themselves to structural modeling with NZ Police data. The results from testing each of these hypotheses are presented below.

Job interest and role breadth self-efficacy

Hypothesis 3 proposed that job interest at T1 would predict role breadth self-efficacy at T2 among police newcomers. Figure 8 shows that job interest was the strongest predictor of role breadth self-efficacy in the hypothesised model ($\beta = .250$, $p < .001$). As model modifications were made, the path between job interest and role

breadth self-efficacy remained statistically significant (β = .258, p < .001). These results suggest that newcomers who joined the police force with a genuine interest in the job had greater perceptions of competence when compared to recruits with lesser job interest, thereby supporting Hypothesis 3.

Proactive personality and role breadth self-efficacy

Hypothesis 4 proposed that newcomers with a more proactive personality at T1 would have a higher level of role breadth self-efficacy at T2 when compared to newcomers with a lesser proactive personality. Figure 8 shows that proactive personality did not predict future role breadth self-efficacy in the hypothesised model, (β = .093, p = .063), thereby resulting in the removal of this path. When model modifications were made, proactive personality had an indirect relationship to role breadth self-efficacy via team support, leader-member exchange, and job interest. On the basis of these results, Hypothesis 4 was not supported, since a proactive personality did not directly contribute to a broader and more proactive assessment of personal capability among police recruits.

Team support and role breadth self-efficacy

Hypothesis 5 proposed that support from more experienced team members at T1 would positively predict recruit role breadth self-efficacy at T2. Figure 8 shows that team support was a weak predictor of role breadth self-efficacy in the hypothesised model (β = .186, p < .001). Despite this, the path between both variables remained statistically significant after model modifications (β = .188, p < .001) were added. These results suggest that the support of more experienced team members predicted higher levels of role breadth self-efficacy among police newcomers, thereby supporting Hypothesis 5.

Leader-member exchange and role breadth self-efficacy

Hypothesis 6 proposed that a strong leader-member exchange at T1 would positively predict police recruit role breadth self-efficacy at T2. Figure 8 shows that the path between both variables was statistically significant in the hypothesised model (β = .203, p < .001) and continued to explain 21% of the variance in role breadth self-efficacy after model modifications. Overall, these results suggest that recruits with a high-quality relationship with supervisors at T1 had greater perceptions of competence

some 5-weeks later when compared to recruits with a poorer leader-member exchange. These results support Hypothesis 6.

Role breadth self-efficacy and future task mastery

Hypothesis 12 proposed that newcomers with a strong sense of role breadth self-efficacy at T2 would enjoy higher levels of task mastery at T3. Figure 8 shows that of all proximal variables in the hypothesised model, role breadth self-efficacy had the strongest path to task mastery; explaining 42% of the variance in this variable. This path remained statistically significant after making model modifications ($\beta = .271$, $p < .001$) as shown in Figure 9. Overall, these results suggest that recruits with the self-belief to succeed did have higher levels of task mastery relative to newcomers with lower role breadth self-efficacy, thereby supporting Hypothesis 12.

Role breadth self-efficacy and future group fit

Hypothesis 13 proposed that police recruits with a strong sense of role breadth self-efficacy at T2 would assimilate into their cohort group more effectively by T3. This hypothesis was supported, since recruits who had the confidence to carry out a broader, more proactive role did adjust to the group more effectively in both the hypothesised model ($\beta = .231$, $p < .001$) and modified model ($\beta = .144$, $p \leq .01$). On the basis of these results, there is sufficient evidence to suggest that police recruits with a strong sense of role breadth self-efficacy did assimilate more effectively into their cohort group when compared to newcomers with lower self-efficacy, thereby supporting Hypothesis 13.

Role breadth self-efficacy and future role clarity

Hypothesis 14 proposed that role breadth self-efficacy at T2 would positively predict role clarity at T3 among police newcomers. Figure 8 shows that of all proximal variables, role breadth self-efficacy had the weakest path to role clarity in the hypothesised model ($\beta = .162$, $p < .01$). Post model modifications, this path became statistically non-significant ($\beta = .020$, $p = .692$) and was therefore removed from the model. These results provide some evidence to suggest that police recruits with the self-efficacy to succeed did have a higher level of role clarity, thereby partially supporting Hypothesis 14.

Building Model Complexity

Stage two of the model building process included the addition of both T5 variables to the modified model: on-the-job performance and organisational commitment (see Figure 10). While factor analysis had identified three distinct components to NZ Police performance, it was the 'tactical' aspect of performance that best captured the proactive, self-starting behaviours identified by Parker (1998, 2000) as being critical to job success. This was the only aspect of performance to therefore be included in the police structural model.

Each variable represented 15-months post-appointment for each police recruit, and 10-months post-Police College. With the addition of these variables, the police sample dropped from 341 cases to 223; yet was still of a satisfactory magnitude for data analysis to have statistical power (Kline, 2005).

Preliminary checks were carried out to reconfirm data normality and the absence of multicollinearity with a reduced dataset. In line with Fife-Schaw (2007), an absolute skewness or kurtosis value above two was taken as evidence of non-normality for the police dataset. In line with Kline (2005), any intercorrelation among police variables exceeding $r = .85$ was used to signal mulitcollinearity. A review of the police dataset found no evidence of extreme outliers, nor any scale measure correlating greater than $r = .438$.

Figure 10 shows that all estimates for the modified model were of a sufficient size and sign ($\beta s = .110$ to $.330$, $ps < .001$ to $< .05$) with the exception of the path between role breadth self-efficacy and group fit ($\beta = .075$, $p = .261$, $CR = 1.124$). While non-significant paths can be considered unimportant to a structural model, they can also be indicative of a sample size that is too small (Byrne, 2001). Removal of such paths can therefore affect the theoretical robustness of a solution in important ways (Kline, 2005). With this in mind, there was a strong argument for the retention of the role breadth self-efficacy and group fit path, since this was significant in the hypothesised model and prior to a reduction in sample size.

A review of MIs revealed no further evidence of misspecification associated with the modified model. All fit statistics were also indicative of very good model-data synergy: $\chi^2 = 48.5$, $df = 28$, $\chi^2/df = 1.732$, GFI = .960, AGFI = .921, sRMR = .071, RMSEA = .057, Lo90 = .028, Hi90 = .084.
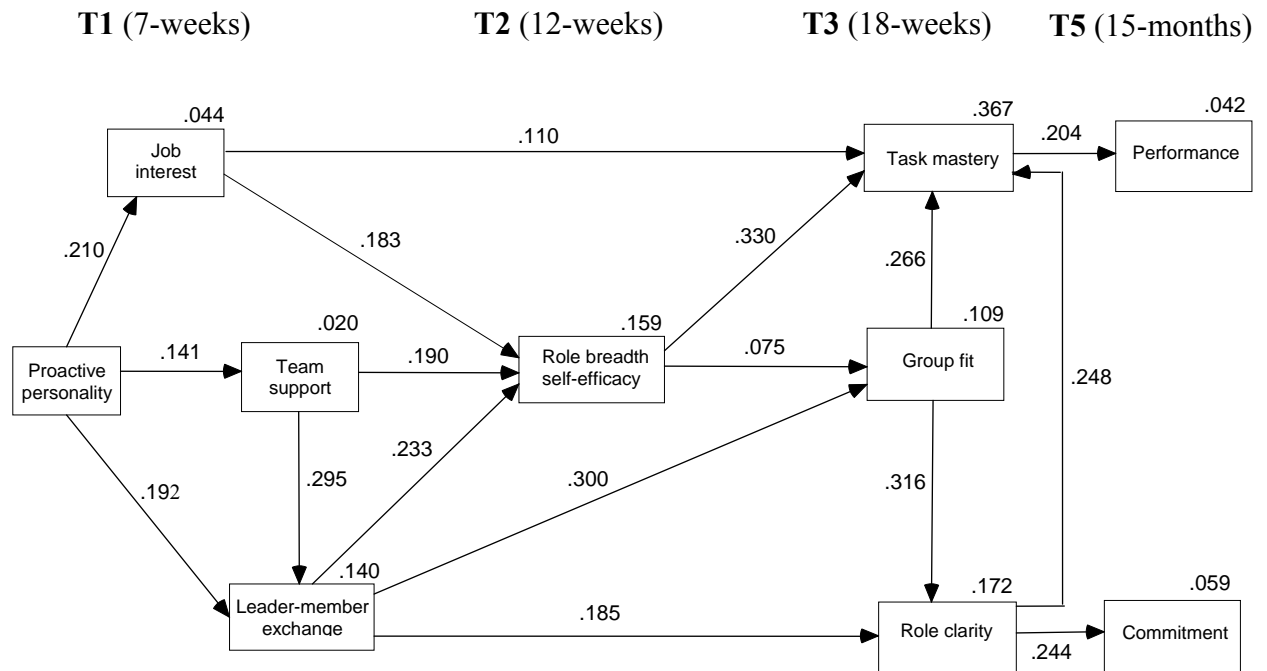
Figure 10. Output path diagram for the NZ Police modified model with T5 variables.

Task mastery and on-the-job performance

Hypothesis 15 proposed that task mastery at T3 would positively predict on-the-job, self-ratings of police tactical performance at T5. Figure 10 supports this hypothesis by showing that task mastery was a significant predictor of self-starting, tactical performance 15-months post-appointment for police recruits ($\beta = .204$, $p < .01$).

Role clarity and organisational commitment

Hypothesis 16 proposed that role clarity at T3 would positively predict organisational commitment at T5. Figure 10 supports this hypothesis by showing that role clarity was a significant predictor of recruit commitment 15-months post-appointment ($\beta = .244$, $p < .001$).

Comparing the NZ Police Hypothesised and Modified Models

In the present study, job interest, proactive personality, team support, and leader-member exchange were hypothesised to predict police recruit role breadth self-efficacy. One's level of self-efficacy was then expected to impact on three proximal outcomes of adjustment, namely, task mastery, group fit, and role clarity. In turn, each proximal outcome was hypothesised to predict two more distal outcomes; on-the-job performance and job commitment.

Using a range of model-fitting statistics and a thorough knowledge of the research domain, a number of improvements were made to the hypothesised model, resulting in the establishment of a modified model. To compare the relative fit of both models to police data, consideration was given to (a) the strength of paths by examining parameter estimates, (b) changes in explained variance, and (c) overall model-data fit (Weston & Gore, 2006).

Table 24 provides a summary of all estimated values for the NZ Police hypothesised versus modified model. This output shows that seven of the nine paths originally hypothesised were still statistically significant in the modified model. Parameter estimates indicate that of these seven paths, five paths remained the same and two paths became weaker. In isolation, individual parameter estimates did not determine the viability of either the modified model or the hypothesised model in explaining police model-data fit.

A second piece of evidence was therefore sought in the form of squared multiple correlations. These showed that the modified model explained no more of the variance in role breadth self-efficacy ($R^2 = 16\%$) when compared to the hypothesised model ($R^2 = 15\%$), but did explain a greater portion of the variance in each criterion variable ($R^2 = 4\%$ to 37%) when compared to the hypothesised model ($R^2 = 3\%$ to 18%). The third and final piece of evidence to substantiate model selection was sought from overall goodness-of-fit statistics; a summary of which is shown in Table 25. Collectively, these show that all modified model-fit statistics were consistent with a well-fitting model, and were not matched in terms of size by any hypothesised values. On the combined weight of this evidence, the modified model did emerge as a potentially better fit to police data than the hypothesised model.

Table 24

Summary of all Estimated Values for the NZ Police Hypothesised and Modified Models

Variable paths	Hypothesised model estimates	Hypothesised model *SEs*	Hypothesised model *CRs*	Hypothesised model *ps*	Modified model estimates	Modified model *SEs*	Modified model *CRs*	Modified model *ps*
Proactive personality to Team support					.148	.042	2.756	.006
Proactive personality to LMX					.181	.036	3.519	***
Proactive personality to Job interest					.198	.034	3.727	***
Proactive personality to RBSE	.093	.047	1.858	.063				
Team support to LMX					.271	.046	5.271	***
Job interest to RBSE	.250	.073	4.998	***	.258	.074	5.247	***
Team support to RBSE	.186	.060	3.719	***	.188	.063	3.655	***
LMX to RBSE	.203	.067	4.063	***	.214	.071	4.157	***
LMX to Group fit					.297	.044	5.643	***
RBSE to Task mastery	.420	.047	8.532	***	.271	.042	5.916	***
RBSE to Group fit	.231	.033	4.386	***	.144	.032	2.739	.006
RBSE to Role clarity	.162	.034	3.035	.002				
Group fit to Role clarity					.333	.053	6.515	***
LMX to Role clarity					.222	.044	4.346	***
Job interest to Task mastery					.175	.062	3.920	***
Group fit to Task mastery					.262	.072	5.468	***
Role clarity to Task mastery					.250	.069	5.315	***
Task mastery to Performance	.204	.089	3.102	.002	.204	.089	3.106	.002
Role clarity to Commitment	.244	.127	3.744	***	.244	.127	3.745	***

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy; Estimate = estimated value; *SE* = standard error, *CR* = critical ratio;
ps = probability statistic
***$p < .001$

Table 25

Summary of Goodness-of-Fit Statistics Comparing the NZ Police Hypothesised and Modified Models

Model	χ^2	df	sRMR	GFI	AGFI	RMSEA	LO 90	HI 90
NZ Police hypothesised	288.5	21	.174	.789	.638	.194	.174	.214
NZ Police modified	48.5	28	.071	.960	.921	.057	.028	.084

Study 2: NZ Graduates

<u>Graduate Preliminary Analysis</u>

Data from 132 graduate newcomers involved in the present study was manually entered into an excel spreadsheet and then transferred to SPSS (2005). In line with the handling of NZ Police data, frequency statistics were created for each variable to aid in data screening and to check for any outliers, missing data, and mid-point responding. Even though one male outlier emerged based on age, this person was not removed from data analysis since there was no evidence of extreme responding. As shown in Table 26, 100% of graduates completed the first questionnaire, while 96% still remained in the study at T4.

Table 26
Summary of Responding by Graduates (T1 to T4)

	Valid cases			Missing cases	
	N	Percent		*N*	Percent
T1 (7-weeks)	132	100.0%		0	0%
T2 (12-weeks)	127	96.2%		5	3.8%
T3 (18-weeks)	129	97.7%		3	2.3%
T4 (24-weeks)	126	95.5%		6	4.5%

<u>Checking for skewness and kurtosis.</u>

Total scale scores were calculated for each graduate variable in SPSS (2005) as a precursor to checking data normality. Since the graduate group was < 300, variables could be rejected as non-normal with a skewness or kurtosis z-value greater than 3.29 (Fife-Schaw, 2007). Of all variables, proactive behaviour was the only one with a skewness statistic that exceeded this ideal at both T2 ($z = 3.60$, $SE = .21$) and T4 ($z = 3.49$, $SE = .22$). The distribution of graduate scores at each time point was confirmed by a histogram and in both cases it showed a positive skew. A square root mathematical transformation of the data was then applied so that proactive behaviour at T2 and T4

would approximate a more normal distribution. Transformed scale scores did not improve the skewed pattern of responding and hence the non-normal measures were retained for on-going data analysis.

Participant attrition.

As shown in Table 26, the participation rate for graduates in the present study was extremely high, with only 6 people omitting to complete the final questionnaire at T4. In line with Tabachnick and Fidell (2001), this equated to less than 5% attrition, thereby negating the need to test for any difference between graduates who dropped out of the study and those who remained in.

Demographic differences and attrition.

Analysis was conducted on graduate missing data to explore whether participant attrition could be linked to two distinct demographic indicators; gender and ethnicity. With the exception of 1 graduate outlier, there was only one category of participants (< 20 years to 30 years), thereby excluding the need to conduct any age analysis. A summary of crosstab results are presented in Table 27, and suggest that graduate attrition was random for all time periods and across all demographic markers.

Table 27
Chi-Square Tests of Attrition for Graduates

Demographic	x^2	p
Gender T2	.15	.70
T3	2.89	.09
T4	.58	.45
Ethnicity T2	1.14	.29
T3	.07	.80
T4	2.30	.13

Note. *df* = 1 for all analysis

Consistent with police analysis, a 2 (gender: male, female) by 2 (ethnicity: New Zealand European, non- New Zealand European) MANOVA was conducted to verify the generalisability of T1 results. Multivariate results found no significant effects; Fs(6, 51) = .37 to .61, ps = .72 to .90, partial η^2 = .04 to .07, thereby suggesting that graduate attrition was not biased by gender or ethnicity.

Testing for any NZ Graduate Organisational Differences

Since multiple organisations were involved in the graduate study, an additional piece of analysis was conducted to explore if any pre-training differences existed in proactive behaviour at an organisational-level. Since training delivery occurred within 2 to 4 days of graduate employment for members of the intervention group, obtaining this measure was impractical. Instead, a one-way (proactive behaviour) between-groups (organisations x 10) ANOVA was conducted to explore the impact of organisational membership on levels of proactive behaviour at T1. Results showed no significant effects; F(9,122) = 1.06, p = .40. A summary of means and standard deviations for proactive behaviour across T1 to T4 for each graduate organisation is shown in Table 28.

Table 28
Means and Standard Deviations for Proactive Behaviour Across 10 Graduate Organisations

Organisation	Proactive Behaviour							
	T1		T2		T3		T4	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
A (N = 7)	23.52	10.16	18.75	9.42	15.75	9.83	17.46	13.60
B (N = 17)	34.43	15.50	27.60	10.68	32.80	14.76	31.63	18.05
C (N = 7)	26.06	13.09	22.85	12.65	23.04	13.99	23.02	13.61
D (N = 26)	34.28	14.22	28.80	11.29	26.09	12.51	24.33	9.19
E (N = 9)	29.04	16.75	26.13	10.05	21.71	8.63	25.38	13.93
F (N = 14)	31.83	15.38	31.12	13.16	27.90	13.15	24.70	9.75
G (N = 17)	36.54	11.77	29.95	12.51	26.00	10.92	29.46	12.79
H (N = 15)	36.85	12.52	26.96	14.12	30.86	13.19	29.61	12.70
I (N = 14)	34.66	16.80	31.90	9.73	34.63	12.55	31.81	10.20
J (N = 6)	26.72	10.29	24.56	20.92	25.81	11.64	24.56	6.49

Note. N = total number of participants; M = mean; SD = standard deviation

Testing the Psychometric Robustness of each Mediating Variable for NZ Graduates

In line with the NZ Police, the relationship between each T1 variable and role-breath self-efficacy and proactive behaviour was tested using a Pearson's product-moment correlation coefficient. Table 29 shows that for graduates, two weak relationships existed between proactive personality and leader-member exchange at T1 and proactive behaviour at T2 (i.e., $rs = .19$ to $.21$, $ps < .05$). A weak relationship also existed with group fit at T3 (i.e., $r = .23$, $p < .05$). In contrast, the role breadth self-efficacy variable had a weak to medium relationship with six T1 predictor variables (i.e., $rs = .21$ to $.46$, $ps < .01$ to $< .05$) and a medium to strong relationship with each T3 proximal criterion variable (i.e., $rs = .34$ to $.58$, $ps < .01$).

Table 29 is supplemented by a summary of item ranges, means, and standard deviations for each graduate variable. These are shown in Table 30.

Table 29

Correlation Analysis Between all Variables for NZ Graduates

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1. Fluid Intelligence	-																						
2. No. of jobs	.09	-																					
3. Prior work	.02	.23*	-																				
4. Job interest	-.02	.15	.22*	-																			
5. Team support	.13	.32**	.13	-.02	-																		
6. Pro. personality	-.02	.26**	.43**	.36**	.13	-																	
7. LMX	-.12	.21*	.22*	.15	.07	.14	-																
8. P.BehT1	-.03	.14	.06	-.10	.11	.23**	.12	-															
9. P.BehT2	.03	.09	.08	.10	.17	.21*	.19*	.64**	-														
10. P.BehT3	.02	.15	.04	-.05	.21*	.20*	.14	.57**	.63**	-													
11. P.BehT4	-.03	.02	-.05	.01	.10	.21*	.149	.54**	.59**	.75**	-												
12. RBSET1	.10	.33**	.35**	.41**	.20*	.53**	.32**	.15	.24**	.08	.10	-											
13. RBSET2	-.01	.22*	.30**	.37**	.24**	.46**	.38**	.21*	.25**	.15	.22*	.79**	-										
14. RBSET3	-.06	.18*	.35**	.34**	.27**	.52**	.30**	.24**	.20*	.14	.147	.72**	.80**	-									
15. RBSET4	.00	.25**	.16	.30**	.18*	.51**	.28**	.27**	.28**	.18*	.33**	.66**	.67**	.75**	-								
16. MgerT1	.16	.02	-.10	-.03	.06	.04	.11	.06	.10	.06	.08	.07	.047	.03	.06	-							
17. MgerT2	.29*	.31**	-.01	-.11	.16	-.09	.03	.07	.12	.13	.14	-.01	-.04	-.11	-.08	.218*	-						
18. MgerT3	.07	.15	.08	-.02	.07	.03	.08	.08	.10	.09	.07	.04	.15	.09	.03	.17	.18	-					
19. Task mastery	-.04	.11	.18	.37**	.13	.26**	.32**	.02	-.01	-.08	.12	.54**	.58**	.63**	.52**	.09	-.10	.01	-				
20. Group fit	-.11	.15	.14	.25**	.12	.37**	.31**	.19*	.23*	.15	.20*	.43**	.38**	.49**	.47**	-.03	-.05	.11	.46**	-			
21. Role clarity	-.09	.15	.24*	.14	.35**	.25**	.33**	.16	.11	.15	.15	.31**	.34**	.42**	.29**	.01	.01	.03	.41**	.42**	-		
22. Performance	-.02	-.09	.08	.10	.03	-.01	-.03	.08	-.07	-.06	.05	.07	.07	.22*	.21*	.09	-.02	-.08	.31**	.27**	.17	-	
23. Commitment	.14	-.10	.22*	.09	.06	.30**	.16	.03	.07	.08	.09	.23**	.12	.20*	.23**	-.12	.05	.02	.21*	.21*	.16	-.03	-

Note. LMX = Leader-member exchange; P.Beh T1 to T4 = Proactive behaviour 7-weeks to 24-weeks; RBSE T1 to T4 = role breadth self-efficacy 7-weeks to 24-weeks; Mger T1 to T3 = Proactive behaviour instructor rating 7-weeks to 18-weeks
*p < .05 **p < .01

Table 30

Item Range, Means, and Standard Deviations for Each NZ Graduate Variable

Variables	Range	NZ Graduates N	NZ Graduates M	NZ Graduates SD
1. Fluid intelligence	1-25	90	15.57	3.32
2. No. of jobs	1-6	132	1.99	1.75
3. Prior work	1-5	94	3.32	.98
4. Job interest	1-5	132	3.96	.66
5. Team support	1-5	132	3.48	.95
6. Pro. personality	1-5	132	3.90	.48
7. LMX	1-5	127	3.97	.56
8. P.Beh T1	1-7	132	5.27	.84
9. P.Beh T2	1-7	127	5.12	.77
10. P.Beh T3	1-7	129	5.12	.80
11. P.Beh T4	1-7	126	5.16	.79
13. RBSE T1	1-5	132	3.12	.69
14. RBSE T2	1-5	127	3.32	.62
15. RBSE T3	1-5	129	3.48	.59
16. RBSE T4	1-5	126	3.63	.57
18. Mger T1	1-5	126	5.47	1.11
19. Mger T2	1-5	125	5.27	1.07
20. Mger T3	1-5	121	5.20	1.02
21. Task mastery	1-5	129	3.71	.56
22. Group fit	1-5	129	4.04	.51
23. Role clarity	1-5	129	3.67	.66
24. Performance	1-5	114	3.30	.62
25. Commitment	1-5	126	3.66	.63

Note. *N* = total number of participants; *M* = mean; *SD* = standard deviation

*$p < .05$ **$p < .01$

With few meaningful correlations between T1 variables and proactive behaviour at T2, there was no justification to undertake more advanced types of analysis (i.e., multiple regression, ANOVA, and SEM with this mediator. Each type of analysis lent itself to testing various hypotheses in the present study, but required a meaningful relationship to exist between each variable of interest and proactive behaviour. In the case of SEM, some unique issues also existed. Firstly, with a number of weak correlations to proactive behaviour, the easier it would be to fit the data to the hypothesised model. Conversely, with more moderate correlations to role-breath self-efficacy, the more power SEM would have to detect an incorrect model (Garson, 2008).

The second concern with regards to SEM revolved around the non-normal distribution of proactive behaviour at T2 and T4, thereby violating the assumption of normality.

In line with NZ Police, Model A (Figure 1) emerged as the only feasible research proposition with the graduate group. It hypothesised that individual and group-level factors would positively predict role breadth self-efficacy among graduate newcomers (Hypotheses 1 to 6). In turn, the confidence to perform a broader, more proactive role was predicted to facilitate multiple proximal (Hypotheses 12 to 14), and distal job outcomes (Hypotheses 15 to 17). Training graduates in a repertoire of proactive behaviours was expected to moderate the relationship between role breadth self-efficacy and future proaction. In other words, self-efficacy was expected to predict future proaction when training was present (Hypothesis 11). The longitudinal pattern of proactive behaviour for graduates (Hypotheses 8) was also expected to be influenced by external socialising influences and be observable to others (Hypotheses 10).

NZ Graduate Hypothesis Testing Part 1

In line with the NZ Police, Part 1 of hypothesis testing only includes those variables that lent themselves to SPSS (2005) analysis (i.e., Hypotheses 1, 2, 8, 10, 11, 15 to 17). Hypotheses tested via SEM (i.e., Hypotheses 3 to 6; 12 to 14) are presented immediately after SPSS output.

Prior work experience and future role breadth self-efficacy

Hypothesis 1 stated that both prior work quality and quantity at T1 would jointly predict role breadth self-efficacy at T2. In particular, it was hypothesised that graduates with relevant work experience in multiple jobs would judge themselves more capable of taking on a broader, more proactive role when compared to graduates without any relevant, prior work experience. In total, 92 graduates acknowledged having some form of prior work experience: in < 2 jobs ($n = 43$) and 3 to 5 jobs ($n = 49$). Whereas prior work experience in one or two jobs had a non-significant impact on role breadth self-efficacy at T2 ($r = .16, p = .36$), prior work experience in three or more jobs had a moderate, positive correlation with role breadth self-efficacy ($r = .44, p < .01$).

Hypothesis 1 was supported by graduate data, with both the number of jobs and the quality of one's prior work experience impacting on role breadth self-efficacy beliefs at T2.

Fluid intelligence and future role breadth self-efficacy

Hypothesis 2 stated that fluid intelligence measured pre-T1 would positively predict future role breadth self-efficacy among graduate newcomers. Using a Pearson's product-moment correlation, results showed a non-significant relationship between fluid intelligence and role breadth self-efficacy at T2 for graduate employees ($r = -.02$, $p = .86$). Hypothesis 2 was therefore not supported, since a higher level of fluid intelligence did not stimulate a more proactive self-belief among graduate newcomers.

Proactive behaviour across time

Hypothesis 8 proposed that graduate employees would report the highest level of proactive behaviour at T1 and gradually decline in their level of proaction through toT4. It was also hypothesised that this decline would be of a lesser magnitude for individuals who participated in pre-T1 proactive training. To test this assumption, a 4 (time: T1, T2, T3, T4) by 2 (intervention: proactive training, control) repeated measures ANOVA was conducted. Output showed a main effect for time; $F(3, 354) = 17.09$, $p < .01$, with a large effect size (partial $\eta^2 = .13$), and a non-significant interaction effect for time by intervention; $F(3, 354) = 2.41$, $p = .07$, partial $\eta^2 = .02$. Between subject analysis showed that the main effect for intervention was non-significant; $F(1, 118) = .49$, $p = .48$, partial $\eta^2 = .00$.

In order to explore the magnitude of the decrease in proaction more closely for each group, a series of paired-samples t-tests were also conducted. Results showed that T1 represented the peak of proactive behaviour for both the training and control groups. Results also showed that between T1 and T4, the decrease in proaction was of a large magnitude for both the training group ($M = 33.22$, $SD = 15.18$) to [$M = 28.52$, $SD = 14.50$, $t(58) = 2.83$, $p \leq .01$, $\eta^2 = .12$] and control group ($M = 33.06$, $SD = 13.82$) to [$M = 25.58$, $SD = 10.59$, $t(66) = 4.61$, $p \leq .00$, $\eta^2 = .24$].

A graphical summary of graduate responding is shown in Figure 11. On the basis of these results, Hypothesis 8 was partially supported by the graduate group since self-rated proactive behaviour did peak at T1 and then drop for both the proactive training group and control group. Contrary to Hypothesis 8 however, the decline in proaction was no less for the training group when compared to the control group, despite there appearing to be a difference at T3 and T4.
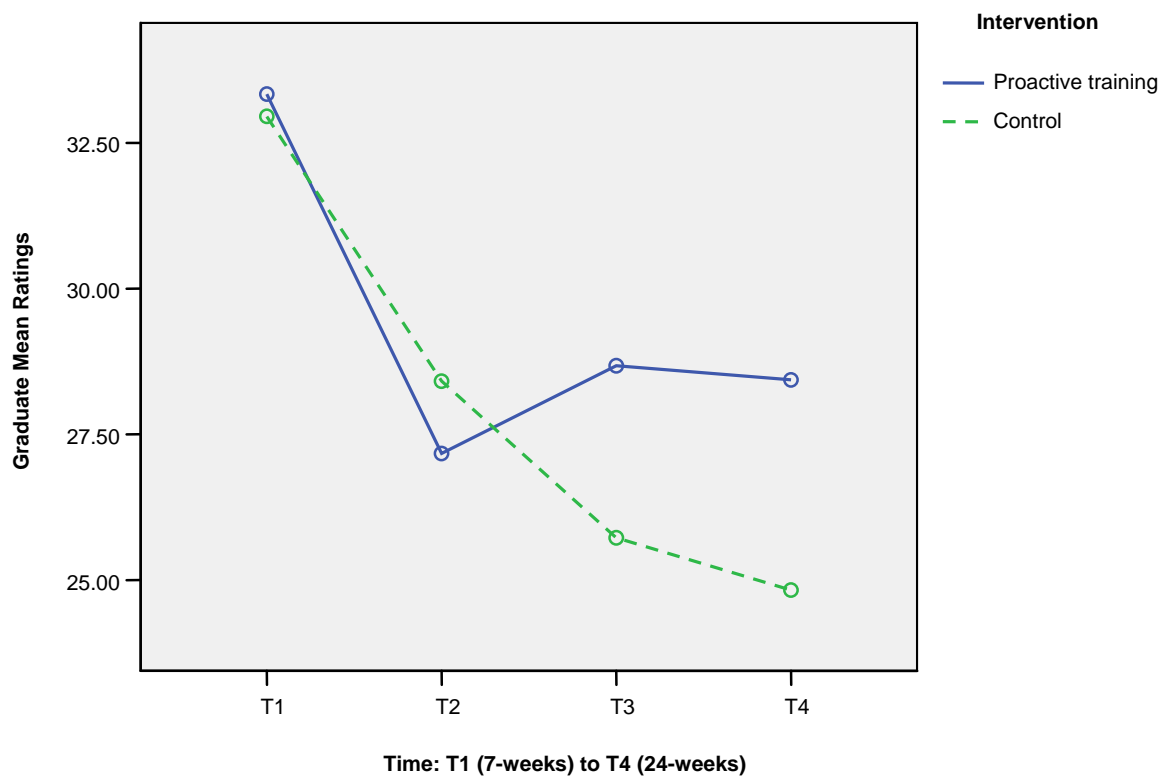
Figure 11. Mean ratings of proactive behaviour for graduate employees between T1 (7-weeks) and T4 (24-weeks).

Manager's observation of proactive behaviour

Hypothesis 10 proposed that managers would observe the highest level of proaction from graduate newcomers at T1, and then observe an overall decline in information-seeking, feedback-seeking, and listening behaviour through to T3. It was also proposed that the overall decline would be of a lesser magnitude for graduates who received training in proactive tactics pre-T1, when compared to a control group who received no training. In line with NZ Police analysis, a 3 (time: T1, T2, T3) by 2

(intervention: proactive training, control) repeated measures ANOVA was undertaken to test this hypothesis. Results suggest a main effect for time; $F(2, 222) = 6.27$, $p < .01$, partial $\eta^2 = .05$, but no interaction effect for time by intervention; $F(2, 222) = 1.02$, $p = .36$, partial $\eta^2 = .01$. Between-subject analysis also found that the main effect for intervention was non-significant; $F(1, 111) = 3.44$, $p = .07$, partial $\eta^2 = .03$.

These results suggest that graduate managers did observe a change in proactive behaviour over time among graduates, yet this change could not be attributed to one's intervention group since managers did not observe any difference in the information-seeking, feedback-seeking, and listening behaviour of graduates who received training versus those who did not. At T1 however (and approximately 6-weeks post-graduate training), managers did observe a significantly higher level of proaction from the training group ($M = 39.41$, $SD = 20.92$) when compared to the control group [$M = 31.05$, $SD = 20.92$; $t(124) = 2.15$, $p < .05$].

Since Hypothesis 10 was also concerned with the overall rate of decline in graduate proaction, a follow-up series of paired-sample t-tests were conducted. These showed that contrary to Hypothesis 10, managers observed a sharper decline in proaction between T1 and T3 for the group who received training; $t(54) = 3.43$, $p < .01$) when compared to the control group who received no training; $t(61) = 1.91$, $p = .06$). A graphical representation of these results is shown in Figure 12.
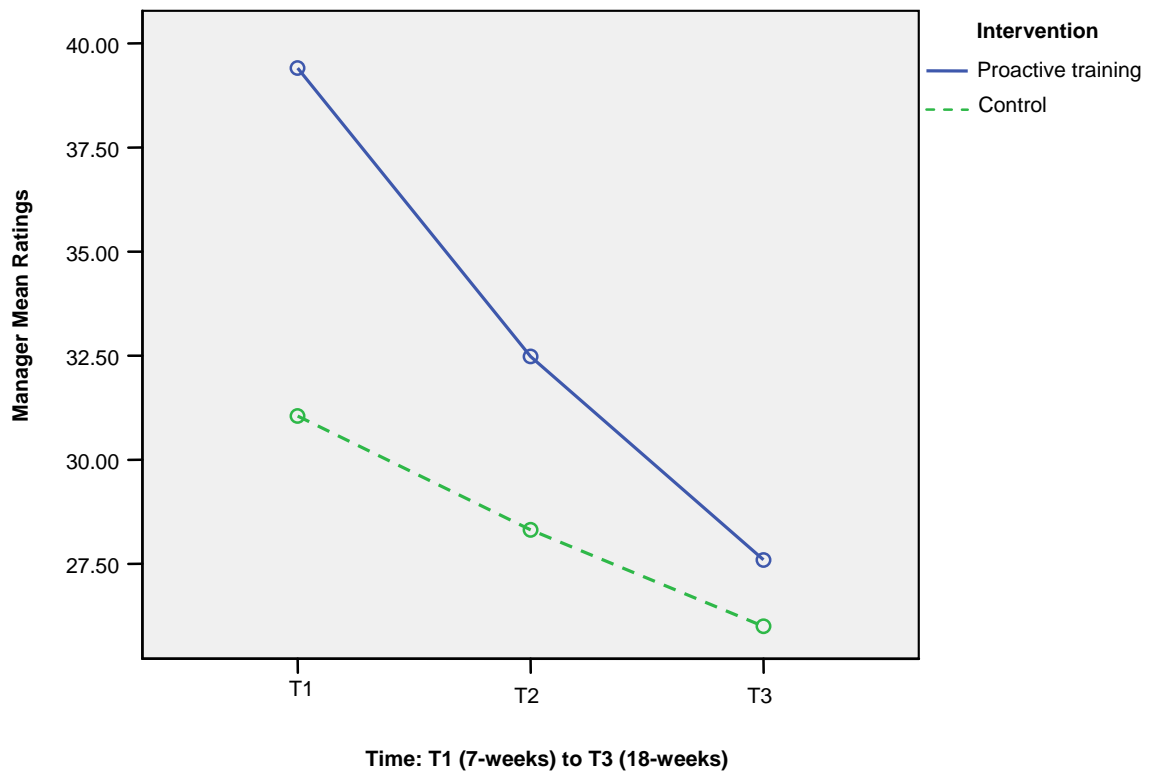
Figure 12. Manager mean ratings of graduate proactive behaviour between T1 (7-weeks) and T3 (18-weeks).

Figure 12 graphically shows that managers did observe less proactive behaviour from all graduates over time, with the rate of decline more substantial for graduates who received training when compared to those who did not. While managers did observe a significantly higher level of proaction from the training group at T1, they did not observe any overall difference in the proactive behaviour of graduates who received training versus those who did not. On the basis of these findings, Hypothesis 10 was partially supported by the graduate group.

Proactive training as a moderator

Hypothesis 11 dealt with the role of training in moderating the relationship between role breadth self-efficacy and future proactive behaviour. In particular, it was proposed that self-efficacy would more readily predict future proaction when training was present. A hierarchical regression in line with the NZ Police was undertaken to

verify this hypothesis. Since proactive training was delivered pre-T1 for graduates, it made sense to test the relationship between role breadth self-efficacy at T1 (RBSE) and future proactive behaviour at T2. To support analysis, a new bivariate intervention variable which recognised each graduate as having received training or not was created and labeled 'Group'. A new interaction variable (i.e., RBSEGrp) was also established which combined each graduate's role breadth self-efficacy scores at T1 with their intervention group. Results from this analysis are presented in Table 31.

Even though the interaction effect was significant, the R^2 change statistic shows that no extra variance in proactive behaviour was accounted for by training. For graduates, these results suggest that training did not have any moderating impact on the relationship between role breadth self-efficacy at T1 and proactive behaviour at T2; $F(3, 123) = 2.63$, $p \leq .05$. On the basis of these results, Hypothesis 11 was not supported for the graduate group.

Table 31
Summary of Hierarchical Regression Analysis Predicting the Moderating Role of Training on Graduate Proactive Behaviour

Variable	B	SE B	β	R^2	$\triangle R^2$	F	Sig. *F*
Step 1							
RBSE	.61	.22	.24				
Group	-.38	2.13	-.06	.06	6%	3.94	.02
Step 2							
RBSEGrp	-.13	.45	-.12	.06	6%	2.63	.05

Note. RBSE = Graduate role breadth self-efficacy ratings at T1; Group = intervention group; RBSEGrp = role breadth self-efficacy scores at T1 x intervention

Task mastery and future performance

Hypothesis 15 stated that graduate task mastery would positively predict future manager ratings of performance. While this hypothesis lent itself to structural modeling, 24% of manager ratings were missing. To remove these cases from analysis would therefore have reduced the graduate dataset to an unacceptable size (Garson, 2008). As an alternative mode of measurement, a Pearson's product-moment correlation showed that task mastery at T3 did positively predict manager ratings of performance at T4 ($r = .31$, $p < .01$), thereby supporting Hypothesis 15.

To explore this relationship further, a second correlation was conducted to compare the link between task mastery and graduate performance when taking intervention group into account. While no known studies exist, it seems reasonable to assume that proactive strategies such as seeking information, networking, and asking for feedback would positively predict newcomer learning, and in turn, manager ratings of competence. While results showed that the proactive training group rated higher in overall performance ($r = .41$, $p < .01$) when compared to the control group ($r = .38$, $p < .01$), this difference may have been due to chance ($z_{obs} = .045$).

Role clarity and future organisational commitment

Hypothesis 16 stated that role clarity would positively predict future organisational commitment among graduate newcomers. Using a Pearson's product-moment correlation, results found a non-significant relationship between these two variables ($r = .16$, $p = .08$). While liking certain freedoms, Gen Y employees are not adverse to clear direction and mentoring (Gursoy et al., 2008). With that in mind, a second correlation between role clarity and organisational commitment was conducted, taking the induction processes of the organisation into account. The assumption was that graduates who were thoroughly inducted into an organisation should have a clear sense of their job, expectations, and role parameters. In turn, they should feel more connected towards their employing organisation.

Results showed that the relationship between role clarity and organisational commitment was insignificant, regardless of whether graduates were part of a formal, induction process or not ($rs = .02$ to $.19$, $ps = .06$ to $.93$). On the basis of these results,

Hypothesis 16 was not supported, since role clarity did not predict future organisational commitment among graduate newcomers.

Group fit, future performance and organisational commitment

Hypothesis 17 stated that group fit would positively predict future ratings of performance and organisational commitment among graduate newcomers. While Hypothesis 17 lent itself to structural modeling with the graduate group, it was excluded on the basis that neither the performance nor commitment variables were included in the model building process. As an alternative mode of measurement, a Pearson's product-moment correlation was used. Results showed that group-fit at T3 had a weak, but positive correlation with manager ratings of performance ($r = .27, p < .01$) and manager ratings of organisational commitment ($r = .21, p < .05$) at T4. On the basis of these results, Hypothesis 17 was supported by the graduate group, since group fit was found to positively predict future ratings of performance and organisational commitment. This relationship was explored further by undertaking a second correlation which took the intervention group into account.

Results showed that for graduates who attended training, there was a moderately strong relationship between group fit and future manager ratings of performance ($r = .43, p < .01$), yet a non-significant relationship between group fit and future organisational commitment ($r = .14, p = .31$). In contrast, there was a non-significant relationship between group fit and future manager ratings of performance ($r = .01, p = .46$) for control group members, and a moderately strong relationship between group fit and future organisational commitment ($r = .35, p < .01$).

To test whether the correlations for each intervention group were significantly different, r values were then converted to z scores. Results showed that group fit did explain significantly more of the variance in manager's rating of performance for graduates who received training than for graduates who did not ($z_{obs} < 1.96$), yet did not explain any more of the variance in commitment for graduates who received training ($z_{obs} > 1.96$). More specifically, group fit better predicted manager ratings of performance for graduates who attended training, yet had no bearing on the commitment of graduates when access to training was taken into account.

Testing the Graduate Hypothesised Model

For the graduate group, seven hypotheses lent themselves to simultaneous analysis via SEM. In particular, having an interest in one's job, a proactive personality, support from more experienced team members, and a positive leader exchange were hypothesised to predict graduate role breadth self-efficacy (Hypotheses 3 to 6). With confidence in one's ability to succeed, a graduate was predicted to achieve task mastery, group fit, and greater role clarity (Hypotheses 12 to 14). In line with previous SEM research, results in this section are reported to three decimal places.

Preliminary Analysis

A review of responding revealed that 7 graduates had at least one missing questionnaire between T1 and T3. Removing this group from all subsequent analysis left a total of 125 graduates for model building. Preliminary checks were also carried out to reconfirm data normality and the absence of multicollinearity with a reduced dataset. In line with Fife-Schaw (2007), a z-value greater than 3.29 was deemed unacceptable for the graduate group and bivariate correlations greater than $r = .85$ were potentially problematic (Kline, 2005). A review of the graduate dataset found no evidence of extreme outliers or any scale measures that correlated greater than $r = .59$.

Sample size.

In line with Garson (2008), the ideal number of graduates to undertake structural modeling was 178 (i.e., 8 observed variables and their unobserved measurement error x 8 + 50). While the graduate sample did not meet this ideal, it was still of a 'medium' magnitude (Kline, 2005).

<u>Graduate Measurement and Structural Modeling</u>

<u>The Measurement Model</u>

Consistent with the handling of NZ Police data, a two-step approach was adopted for evaluating the graduate dataset: a measurement model and an observed manifest model. Each measurement sub-model only included the indicator items that had already proven themselves to satisfactorily load onto each latent variable in the police sample. Table 32 shows that each indicator loaded highly on its latent variable, with all estimates within the range of .55 to .98. All critical ratios were ≥ 1.96, while all standard errors were in the bounds of acceptability.

Due to insufficient graduate data, the prior work variable ($n = 22$ participants) and performance variable ($n = 118$ participants) were both excluded from the graduate measurement model. Even though both variables had a positive relationship with role breadth self-efficacy, their inclusion in the measurement model would have reduced the sample size to an unacceptable level for structural modeling (Garson, 2008). Since the hypothesised relationships involving fluid intelligence and organisational commitment were not supported, both of these variables were also excluded from the model.

Table 32

Summary of Standardised Parameter Estimates, SEs, and CRs for each Graduate Latent Variable

		T1 Latent variables					T2 Latent variables					T3 Latent variables		
Variable	Item	Estimate	*SE*	*CR*	Variable	Item	Estimate	*SE*	*CR*	Variable	Item	Estimate	*SE*	*CR*
Team support	Q1 4	.785			**RBSE**	Q2 1	.564			**Task mastery**	Q3 8	.770		
	Q1 5	.738	.127	8.939		Q2 3	.603	.207	4.893		Q3 9	.627	.149	6.604
	Q1 6	.976	.121	10.021		Q2 4	.559	.225	4.651		Q3 10	.807	.116	8.472
Job interest	Q1 15	.602				Q2 5	.796	.238	5.615		Q3 11	.660	.132	6.966
	Q1 16	.867	.241	5.579		Q2 6	.712	.224	5.391		Q3 12	.618	.138	6.503
	Q1 17	.700	.169	5.749						**Group fit**	Q3 14	.721		
Proactive personality	Q1 25	.693									Q3 15	.799	.127	6.757
	Q1 26	.730	.164	6.535							Q3 16	.684	.138	6.347
	Q1 27	.553	.129	5.222						**Role clarity**	Q3 18	.699		
	Q1 29	.616	.160	5.737							Q3 19	.763	.187	7.496
	Q1 30	.559	.153	5.273							Q3 20	.895	.185	7.803
	Q1 31	.599	.154	5.599										
LMX	Q2 23	.575												
	Q2 24	.573	.206	4.903										
	Q2 25	.635	.231	5.260										
	Q2 27	.878	.269	5.601										

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy; Estimate = estimated value; *SE* = standard error, *CR* = critical ratio

Goodness-of-fit statistics.

Having estimated the parameters for each measurement sub-model, data-fit was further evaluated via six goodness-of-fit statistics. In addition to the χ^2 and *df* statistic, four other absolute fit statistics were sought: GFI, AGFI, SRMR, and RMSEA. With the exception of the AGFI and RMSEA values for proactive personality, all other statistics were within the range of acceptability (see Table 33).

In line with NZ Police data, fit statistics were not obtained for job interest, team support, group fit, and role clarity, since each measure was fully saturated (i.e., $\chi^2 = 0$, $df = 0$). Instead, the Cronbach's alpha for job interest ($\alpha = .76$), team support ($\alpha = .84$), group fit ($\alpha = .77$), and role clarity ($\alpha = .82$) showed sufficient homogeneity and item inter-correlation to support their inclusion in model building.

Table 33
Goodness-of-Fit Statistics for Each Graduate Latent Variable

	χ^2	*df*	sRMR	GFI	AGFI	RMSEA	Lo 90	Hi 90
Proactive personality	17.8	9	.051	.956	.897	.090	.021	.151
LMX	0.2	2	.008	.999	.996	.000	.000	.079
RBSE	6.3	5	.035	.980	.940	.046	.000	.140
Task mastery	5.6	5	.027	.983	.949	.032	.000	.133

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy

Model modification.

Parameter estimates and fit statistics both suggested that each latent variable adequately described graduate data. A check of standardised residuals also found that no residual value exceeded the ideal of 2.58 specified by Joreskog and Sorbom (1988, as cited in Byrne, 2001), while MIs confirmed there were no parameter cross-loadings to take into account. In line with NZ Police data handling, the final step before progressing to a full structural model was to verify the correlations between each latent variable at each measurement time point.

Once again, each variable was expected to show some relationship to all other variables but still remain independent. Figure 13 supports this proposition, showing weak to moderate correlations among latent variables at each time point and across time (rs = .03 to .53). While related, team support, job interest, proactive personality, leader-member exchange, role breadth self-efficacy, task mastery, group fit, and role clarity were clearly still independent constructs inside the graduate sample.

T1 Latent Variables[a,b,c]
(7-weeks)

T3 Latent Variables
(18-weeks)

e1 → Q1 4 .785
e2 → Q1 5 .738**
e3 → Q1 6 .976***
Team support

e4 → Q1 15 .602
e5 → Q1 16 .867**
e6 → Q1 17 .700***
Job interest

e7 → Q1 25 .693
e8 → Q1 26 .730***
e9 → Q1 27 .553***
e10 → Q1 29 .616***
e11 → Q1 30 .559***
e12 → Q1 31 599***
Proactive personality

e13 → Q2 23 .575
e14 → Q2 24 .573**
e15 → Q2 25 .635***
e16 → Q2 27 .878***
Leader-member exchange

.030 .129 .328* .100 .128 .050

e1 → Q3 8 .770
e2 → Q3 9 .627***
e3 → Q3 10 .807***
e4 → Q3 11 .660***
e5 → Q3 12 .618***
Task mastery

e6 → Q3 14 .721
e7 → Q3 15 .799***
e8 → Q3 16 .684***
Group fit

e9 → Q3 18 .699
e10 → Q3 19 .763***
e11 → Q3 20 .895***
Role clarity

.533*** .492*** .381***

Figure 13. Correlations between graduate latent variables at T1 and T3.

Note.
[a]Q1 and Q3 denotes Questionnaire 1 and 3
[b]The number following Q1 or Q3 reference denotes the questionnaire item
[c]e1 to e16 denotes the measurement error associated with each observed variable
***$p < .001$

Building the Structural Model

Having found that each measurement sub-model was operating adequately, the strength of each hypothesis was tested via a manifest modeling approach. A manifest approach meant the modeling of measured variables only, without the underlying link to indicator items. Manifest analysis is a common and valid SEM technique (Lei & Wu, 2007). The size of the graduate group also made a manifest model more appropriate than a full latent model and reduced the risk of finding any spurious correlations (Little, Cunningham, Shahar, & Widaman, 2002).

Hypothesised Model Assessment

Figure 14 presents the graduate group hypothesised model. This includes a path between each T1 variable and T3 proximal outcome via role breadth self-efficacy at T2. A review of fit statistics shows that graduate data was a poor fit to model, and that modification was needed: $\chi^2 = 85.3$, $df = 21$, $\chi^2/df = 4.062$, GFI = .841, AGFI = .727, sRMR = .141, RMSEA = .158, Lo90 = .124, Hi90 = .194.
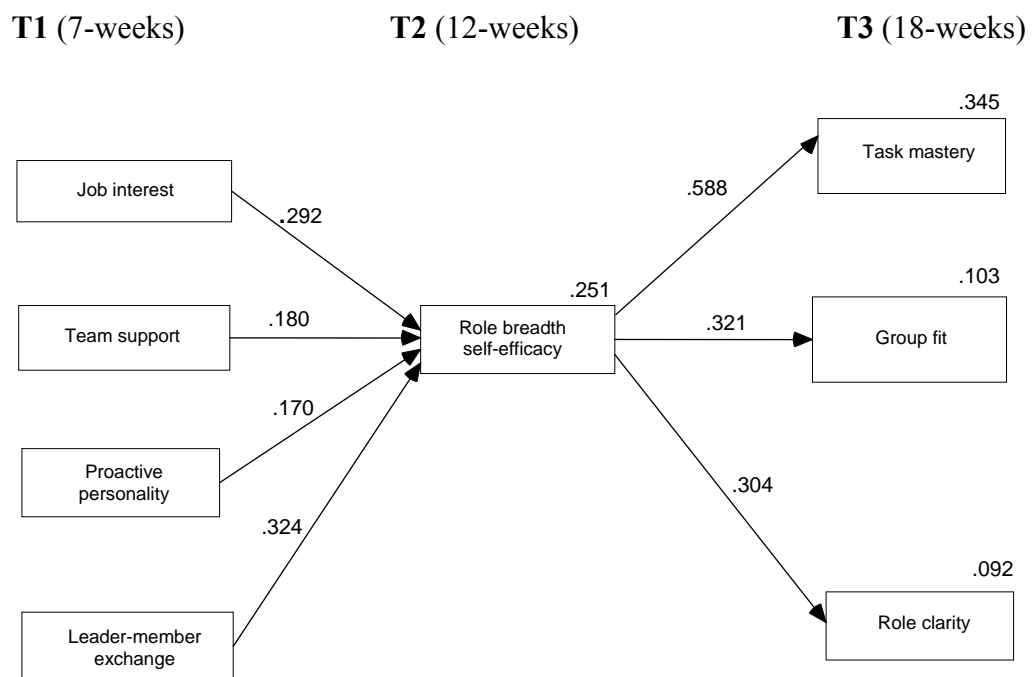

Figure 14. Output path diagram for the graduate hypothesised model.

The Modified Model

There is an absence of support for a quasi-random walk through multiple models generated a priori, and on the basis of modification indexes. There is however, tolerance for *a few* modifications of an initial model that is supported by theoretical justification (McDonald & Ho, 2002). Starting with the hypothesised model, steps were then taken to find a more accurate representation of graduate data that was both empirically sound and supported by research. A review of MIs showed 11 new paths could be taken into account to improve model-data fit. Adding one path at a time, it took eight steps before arriving at the most theoretically justifiable model that also fit graduate data well: (χ^2 = 16.1, *df* = 15, χ^2/df =1.073, GFI = .967, the AGFI = .922, the sRMR = .066, and RMSEA = .025, Lo90 = .000, Hi90 = .091.

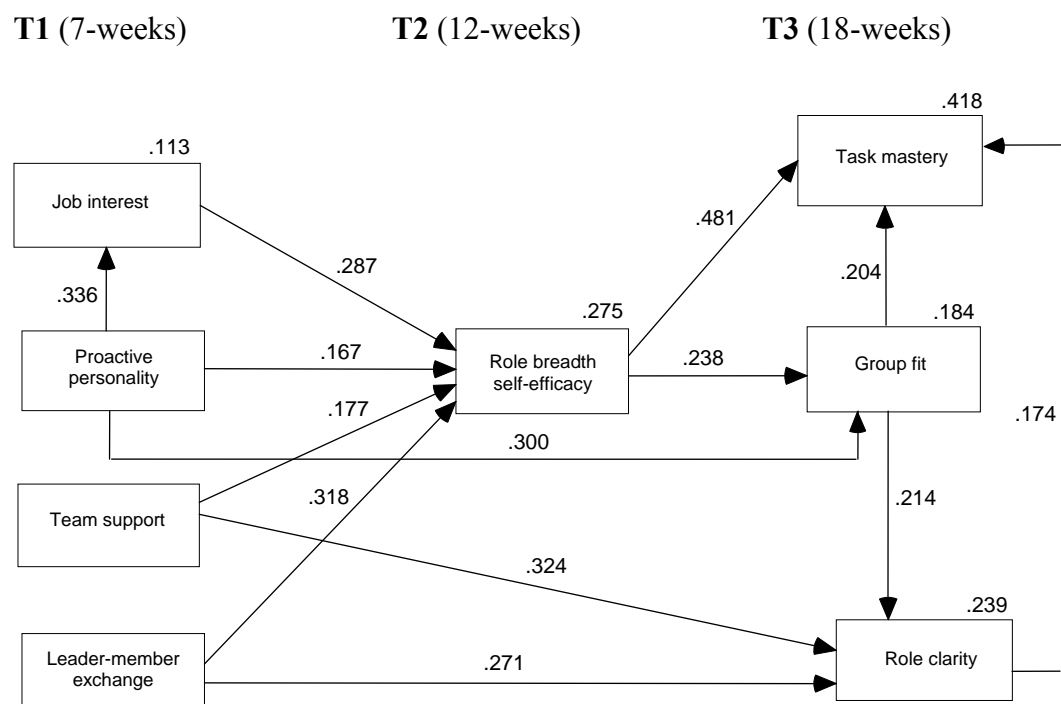

Figure 15. Output path diagram for the graduate modified model.

Figure 15 shows the model to best fit graduate data. In line with the NZ Police model, multiple concurrent relationships were found at T1 and T3 that were not specified a priori, but were essential to explaining graduate adjustment. At T1, proactive personality was a significant predictor of job interest among graduates (*β* =

.336, *p* < .001), while at T3, role clarity and group fit significantly predicted task mastery (*β* = .174 and .204, *ps* ≤ .01 to < .05), and group fit predicted role clarity (*β* = .214, *p* ≤ .01). Support from one's manager and more experienced team members was also found to be a significant predictor of graduate role clarity (*βs* = .271 to .324, *ps* < .001), while having a proactive personality was important to group fit (*β* = .300, *p* < .001).

A number of relationships originally hypothesised were also retained in the graduate modified model. In particular, job interest, proactive personality, team support, and leader-member exchange still emerged as significant predictors of role breadth self-efficacy. In turn, role breadth self-efficacy was still an important predictor of task mastery and group fit. In line with the NZ Police model however, role breadth self-efficacy did not predict role clarity among graduate employees, and therefore this path was removed from the graduate model. Each of these relationships is reported more fully in 'Graduate Hypothesis Testing Part 2'.

Graduate Hypothesis Testing Part 2

Seven hypotheses in the present study lent themselves to testing via structural modeling with graduate employee data. The results from testing each hypothesis are presented below.

Job interest and role breadth self-efficacy

Hypothesis 3 proposed that job interest at T1 would positively predict role breadth self-efficacy at T2 among graduate newcomers. Structural modeling supports this hypothesis, since the path between job interest and role breadth self-efficacy was statistically significant (*β* = .292, *p* < .001) in both the hypothesised model (Figure 14) and when model modifications were made (*β* = .287, *p* < .001). These results suggest that graduates who professed an interest in their work at T1 more favourably assessed their competence to carry out a broader, more proactive role some 5-weeks later at T2.

Proactive personality and role breadth self-efficacy

Hypothesis 4 proposed that proactive personality at T1 would positively predict role breadth self-efficacy at T2. Figure 14 shows that proactive personality was the weakest predictor of role breadth self-efficacy in the hypothesised model ($\beta = .170, p < .05$), yet the path between both variables still remained statistically significant after model modification ($\beta = .167, p < .05$). While a weak relationship, these results suggest that proactive personality at T1 did positively predict role breadth self-efficacy at T2, thereby supporting Hypothesis 4.

Team support and role breadth self-efficacy

Hypothesis 5 proposed that support from more experienced team members at T1 would positively predict graduate role breadth self-efficacy at T2. Figure 14 shows that behind proactive personality, team support was the next weakest predictor of role breadth self-efficacy in the graduate hypothesised model ($\beta = .180, p < .05$). This path remained statistically significant in the modified model however; still explaining 18% of the variance in graduate role breadth self-efficacy. While a weak relationship, these results suggest that more experienced team members did predict graduate confidence to succeed, thereby supporting Hypothesis 5.

Leader-member exchange and role breadth self-efficacy

Hypothesis 6 proposed that a strong exchange between each graduate and his or her manager at T1 would positively predict role breadth self-efficacy at T2. Results show that the path between leader-member exchange and role breadth self-efficacy was statistically significant in both the hypothesised model ($\beta = .324, p < .001$) and in the graduate modified model ($\beta = .318, p < .001$). These results suggest that approximately 32% of the variance in graduate role breadth self-efficacy at T2 could be predicted by the quality of one's leader-exchange, thereby supporting Hypothesis 6.

Role breadth self-efficacy and future task mastery

Hypothesis 12 proposed that newcomers with a strong sense of role breadth self-efficacy at T2 would enjoy a higher level of task mastery at T3. Figure 14 supports this hypothesis by showing that role breadth self-efficacy explained almost 60% of the variance in task mastery ($\beta = .588, p < .001$) in the hypothesised model. This path remained statistically significant in the graduate modified model ($\beta = .481, p < .001$),

and suggests that the confidence to engage in a broader and more proactive role within the first 3-months of tenure predicted higher levels of future task mastery for graduate newcomers.

Role breadth self-efficacy and future group fit

Hypothesis 13 proposed that graduate newcomers with a strong sense of role breadth self-efficacy at T2 would assimilate into their cohort group more effectively by T3. Results show that role breadth self-efficacy was a moderately strong, statistically significant predictor of group fit in the hypothesised model (β = .321, p < .001), and that this path remained significant in the modified model (β = .238, $p \leq$ .01). These results suggest that role breadth self-efficacy predicted approximately 24% of the variance in graduate adjustment to the workgroup, thereby supporting Hypothesis 13.

Role breadth self-efficacy and future role clarity

Hypothesis 14 proposed that graduates with a strong sense of role breadth self-efficacy at T2 would have a high level of role clarity by T3. Structural modeling shows that role breadth self-efficacy was a moderately strong, statistically significant predictor of role clarity in the hypothesised model; explaining approximately 30% of the variance in one's understanding of his or her job (β = .304, p < .001). Post model modifications, this path became statistically non-significant and was therefore removed from the model (β = .103, p = .246). On the basis of these results, there is some evidence to suggest that the confidence to carry out a broader and more proactive role did predict a higher level of graduate role clarity. These results partially support Hypothesis 14.

Comparing the Graduate Hypothesised and Modified Models

Table 34 provides a summary of all estimated values for the graduate hypothesised versus modified model. Parameter estimates suggest that while the path from role breadth self-efficacy to task mastery and group fit were weaker in the modified model, the strength of all remaining paths were reasonably consistent across both models. Squared multiple correlations also found that the graduate modified model explained 3% more variance in role breadth self-efficacy over the hypothesised model, and between 7% to 15% more variance in task mastery, group fit, and role clarity.

Table 34

Summary of all Estimated Values for the Graduate Hypothesised and Modified Models

Variable paths	Hypothesised model estimates	Hypothesised model *SEs*	Hypothesised model *CRs*	Hypothesised model *ps*	Modified model estimates	Modified model *SEs*	Modified model *CRs*	Modified model *ps*
Proactive personality to Job interest					.336	.056	3.940	***
Job interest to RBSE	.292	.126	3.720	***	.287	.133	3.504	***
Proactive personality to RBSE	.170	.083	2.165	.030	.167	.088	2.039	.041
LMX to RBSE	.324	.111	4.131	***	.318	.111	4.131	***
Team support to RBSE	.180	.086	2.291	.022	.177	.086	2.291	.022
Proactive personality to Group fit					.300	.043	3.538	***
RBSE to Task mastery	.588	.063	8.022	***	.481	.062	6.528	***
RBSE to Group fit	.321	.041	3.740	***	.238	.040	2.807	.005
RBSE to Role clarity	.304	.059	3.522	***				
LMX to Role clarity					.271	.075	3.417	***
Team Support Role clarity					.324	.058	4.100	***
Group fit to Role clarity					.214	.111	2.694	.007
Role clarity to Task mastery					.174	.092	2.412	.016
Group fit to Task mastery					.204	.132	2.745	.006

Note. LMX = Leader-member exchange; RBSE = Role breadth self-efficacy; Estimate = estimated value; *SEs* = standard error, *CRs* = critical ratio. *ps* = probability statistic
***p < .001

Table 35

Summary of Goodness-of-Fit Statistics Comparing the Graduate Hypothesised and Modified Models

Model	χ^2	df	χ^2/df	sRMR	GFI	AGFI	RMSEA	LO 90	HI 90
Graduate hypothesised	85.3	21	4.062	.141	.841	.727	.158	.124	.194
Graduate modified	16.1	15	1.07	.066	.967	.922	.025	.000	.091

The third and final source of evidence to substantiate model selection was sought from overall goodness-of-fit statistics. Table 35 suggests that against all fit values, the graduate modified model provided the best representation of data, while also being a relatively simple model.

Comparing the NZ Police and Graduate Models

In even the most well-designed studies, conclusions may be limited to a particular sample, and subject to such things as sampling effects, the measurement timeframe, or the choice of indicators used to represent latent variables (MacCallum & Austin, 2000). Such issues can undermine the generalisability of findings to other samples and the utility of a model for predicting future behaviour. Replicating SEM findings with alternative samples is essential, especially if a model is built on post-hoc modifications (Lei & Wu, 2007).

In a final piece of analysis, the generalisability of both the NZ Police and graduate models were tested with an alternative dataset (i.e., the NZ Police model was tested with the graduate dataset and vice versa). If the police model fitted graduate data empirically as well as theoretically, then this model offered the greatest potential for replication in other diverse samples. If the police model did not hold for the graduate group then the pattern of assimilation for graduate and police newcomers could be assumed to differ.

Figure 16 shows the output from overlaying the graduate dataset with the NZ Police modified, proximal model. While 11 paths in Figure 16 were significant ($\beta s = .176$ to $.442$, $ps < .001$ to $\leq .05$), five paths were not ($\beta s = .071$ to $.129$, $ps = .076$ to $.433$). MI statistics also confirmed that there were still two outstanding paths (i.e., between proactive personality and group fit; and team support and role clarity) which could improve model-fit.

T1 (7-weeks)   **T2** (12-weeks)   **T3** (18-weeks)
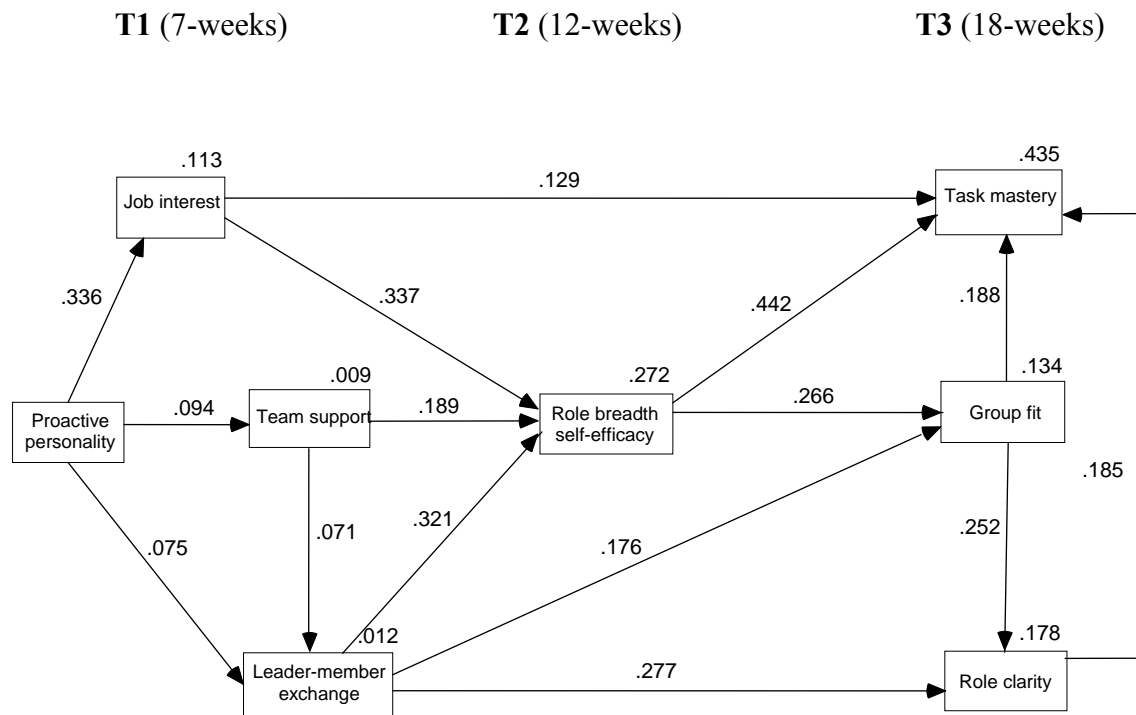
Figure 16. Output path diagram for a graduate alternative model.

Fit statistics in Table 36 suggest that the graduate alternative (i.e., police) model made a negligible improvement over the graduate hypothesised model, and that both were inferior to the graduate modified model in explaining graduate data. Two statistics used to determine which of two or more competing models best fit data drawn from the same population are the Akaike Information Criterion (AIC) and the Expected Cross-Validation Index (ECVI). In both instances, smaller values indicate a better fitting model (Weston & Gore, 2006), that will also cross-validate to future samples (Byrne, 2001). Table 37 shows that the AIC and ECVI statistics for the graduate modified model were smaller than both the graduate hypothesised model and graduate alternative model. The graduate modified model therefore represented the best fit to graduate data.

Table 36

Summary of Goodness-of-Fit Statistics Comparing the Graduate Hypothesised, Modified, and Alternative (i.e., Police) Models

Model	χ^2	df	χ^2/df	sRMR	GFI	AGFI	RMSEA	LO 90	HI 90
Graduate hypothesised	85.3	21	4.062	.141	.841	.727	.158	.124	.194
Graduate modified	16.1	15	1.07	.066	.967	.922	.025	.000	.091
Graduate alternative (i.e., police model)	38.0	13	2.923	.094	.935	.819	.125	.080	.173

Table 37

AIC and ECVI Values for the Graduate Hypothesised, Modified, and Alternative Models

Model	AIC	ECVI
Graduate hypothesised	115.281	.945
Graduate modified	58.113	.476
Graduate alternative (i.e., police model)	83.958	.688

Figure 17 shows the output from overlaying the NZ Police data with the graduate modified model. While 10 paths in Figure 17 were significant (*βs* = .185 to .340, *ps* < .001), three paths were not (*βs* = .028 to .093, *ps* = .069 to .597). MI statistics also confirmed that there were still six outstanding paths which could improve model-fit. Table 38 also shows that the police alternative (i.e., graduate) model made a negligible improvement over the police hypothesised model, and that both were inferior to the NZ Police modified model in explaining police data. AIC and ECVI statistics in Table 39 further suggest that the NZ Police modified model provided the best fit to police data.
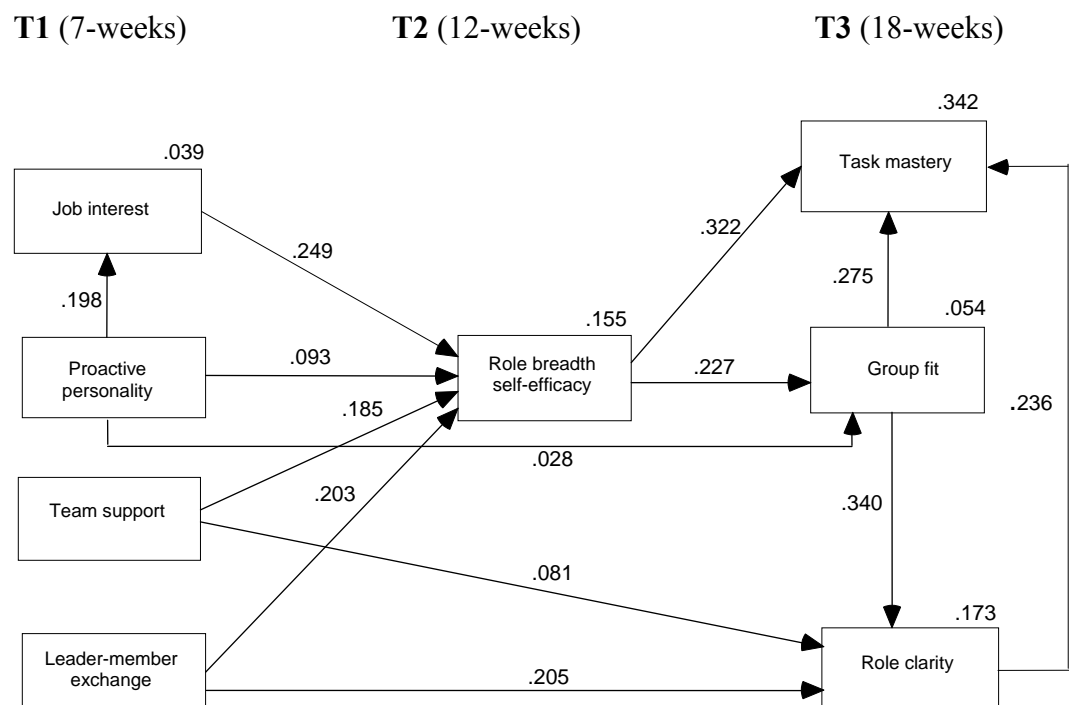
T1 (7-weeks)   **T2** (12-weeks)   **T3** (18-weeks)

Figure 17. Output path diagram for an NZ Police alternative model.

Table 38

Summary of Goodness-of-Fit Statistics Comparing the NZ Police Hypothesised, Modified, and Alternative (i.e., Graduate) Models

Model	χ^2	df	χ^2/df	sRMR	GFI	AGFI	RMSEA	LO 90	HI 90
NZ Police hypothesised	288.5	21	13.738	.174	.789	.638	.194	.174	.214
NZ Police modified	30.1	13	2.315	.056	.979	.943	.062	.033	.092
NZ Police alternative (i.e., graduate model)	119.6	15	7.973	.122	.913	.792	.143	.120	.168

Table 39

AIC and ECVI values for the NZ Police Hypothesised, Modified, and Alternative Models

Model	AIC	ECVI
NZ Police hypothesised	244.567	1.102
NZ Police modified	102.476	.462
NZ Police alternative (i.e., graduate model)	161.581	.475

Summary

In chapter 5, the intention was to test the mediating influence of both role breadth self-efficacy and proactive behaviour on newcomer adjustment. Preliminary analysis identified a number of psychometric weaknesses with the proactive behaviour variable that minimised its usefulness as a mediating influence in the present study. Instead, role breadth self-efficacy emerged as a more appropriate influence between multiple predictor and criterion variables of adjustment.

Results suggest that Model A (Figure 1) provides a good initial step towards building a comprehensive model of newcomer proactive socialisation that spans both an institutionalised and individualised workplace. In particular, a number of individual variables (i.e., prior work quality and quantity and job interest), together with environmental variables (i.e., team support and leader-member exchange) were found to each uniquely contribute to the prediction of task mastery, group fit, performance, and commitment for NZ Police and graduate newcomers. In each case, these individual and environmental variables had an influence because they positively shaped the newcomer's self-confidence to carry out a broader and more proactive role.

A number of relationships not specified a priori also proved to be important considerations in explaining newcomer adjustment – regardless of the socialising environment. For example, proactive personality was an important predictor of job interest, while group fit significantly predicted task mastery. For NZ Police and graduate newcomers, the relationship with one's manager and group also emerged as important considerations in explaining role clarity, which in turn, helped explain newcomer task mastery. A graphical representation of these relationships – tested via correlation coefficients and structural modeling is presented in Figure 18.
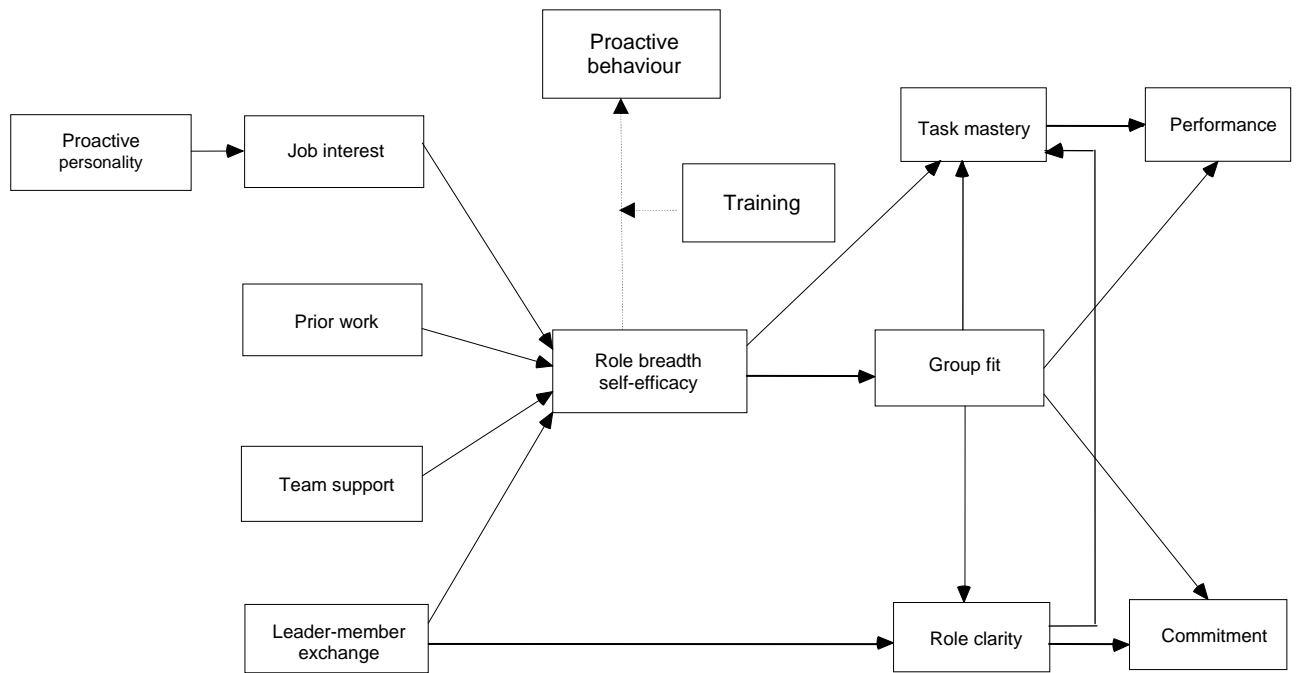
Figure 18. The relationship between multiple antecedents and outcomes of newcomer socialisation inside an institutionalised and individualised workplace.

Counter to hypotheses, two relationships were not supported by either the NZ Police or graduate group. In particular, fluid intelligence did not have any impact on newcomer role breadth self-efficacy, nor did the self-efficacy to perform a broader and more proactive role support newcomer role clarity. Both of these relationships are therefore excluded from Figure 18.

While an important element of the present study, proactive training was found to only moderate the relationship between role breadth self-efficacy and proactive behaviour for NZ Police recruits. For graduates, proactive training did not have any moderating role to play. On the basis of this finding, the relationship between training, role breadth self-efficacy, and proactive behaviour is shown by a dashed line only.

For any selected, well-fitting structural model, there will almost always be more than one plausible, alternative model (McDonald & Ho, 2002), with all models wrong to some degree (MacCallum & Austin, 2000). With this in mind, it is important to acknowledge that while the NZ Police and graduate modified models both fitted each respective dataset well, and identified some useful synergies, they did not necessarily represent the *best* fit, but merely two options of fit.

In chapter 6, these results are discussed more fully, alongside a number of practical implications and options for future research. The methodological strengths and weaknesses of the present study are also discussed.

Table 40

Summary of Hypotheses Testing Outcomes

Hypothesis		NZ Police Outcome	Graduate Outcome
1	Both the quality and quantity of prior work experience will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	Yes	Yes
2	Fluid intelligence will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	No	No
3	Job interest will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	Yes	Yes
4	Proactive personality will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	No	Yes
5	Support from more experienced team members will positively predict role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	Yes	Yes
6	Leader-member exchange will positively predict future role breadth self-efficacy. This relationship will hold for both NZ Police and graduate newcomers.	Yes	Yes
7	NZ Police newcomers will report a stable pattern of proactive behaviour between T1 and T3 (while at Police College) with those recruits trained in proactive tactics demonstrating the highest overall level of proaction. At T4 (post-college), proactive behaviour will increase to reflect one's role transition, with the greatest level of proaction exhibited by recruits who have received proactive training.	Partial	Not Tested
8	Graduate newcomers will report their highest level of proactive behaviour at T1 and gradually decline in their level of proaction through to T4. This decline will be of a lesser magnitude for graduates who have participated in pre-T1 proactive training.	Not Tested	Partial
9	NZ Police instructors will observe a stable pattern of proactive behaviour between T1 and T3 for all recruits. Instructors will observe the highest level of information-seeking, feedback-seeking, and listening behaviour by recruits who are trained in proactive behaviour when compared to a control, leader-member exchange, and placebo intervention.	No	Not Tested
10	Graduate managers will observe the highest level of proaction from graduate newcomers at T1, and then observe an overall decline in information-seeking, feedback-seeking, and listening behaviour through to T3. Managers will observe the overall decline to be less for newcomers trained in proactive behaviour pre-T1 when compared to a control group who receives no training.	Not Tested	Partial

11	Training in proactive behaviour will moderate the relationship between proactive personality and proactive behaviour. In other words, proactive personality is expected to predict proaction when training is present. This relationship will hold for both NZ Police and graduate newcomers.	Yes	No
12	Role breadth self-efficacy will positively predict future task mastery for both NZ Police and graduate newcomers.	Yes	Yes
13	Role breadth self-efficacy will positively predict future group fit for both NZ Police and graduate newcomers.	Yes	Yes
14	Role breadth self-efficacy will positively predict future role clarity for both NZ Police and graduate newcomers.	Partial	Partial
15	Task mastery will positively predict future performance for both NZ Police and graduate newcomers.	Yes	Yes
16	Role clarity will positively predict future organisational commitment for both NZ Police and graduate newcomers.	Yes	No
17	Group fit will positively predict future performance and organisational commitment for both NZ Police and graduate newcomers.	Yes	Yes

CHAPTER 6

DISCUSSION

In Chapter 6, the results from the present study are discussed more fully in the context of both the NZ Police and graduate sample. In the first part of this chapter each research finding is discussed by drawing on supporting, prior studies from the socialisation domain. The second part of this chapter provides a psychometric analysis of each newly created measure, together with a list of recommendations for strengthening each scale. The main contributions of this thesis are presented in the latter part of this chapter, with particular reference to its novel element. A summary of methodological strengths and limitations are also presented, together with a selection of potential areas for future research.

The Effect of Individual Predictors on Newcomer Adjustment

In this section, the results from testing each hypothesis are discussed in turn, and in relation to both the NZ Police and graduate group. Where appropriate, supporting, prior studies are linked back to arguments presented in the introductory chapters of this thesis. Unexpected findings are identified and where viable, suggestions are made for areas of future study.

Hypotheses 1 to 4: Review of Results

In line with Hypothesis 1, both the number of jobs and the quality of one's prior work experience were shown to impact on future role breadth self-efficacy. More specifically, prior work experience positively predicted future self-efficacy among police recruits who had held three jobs and for graduates who had held three or more jobs. These results go some way to confirm that both qualitative and quantitative dimensions of the total work experience need to be considered to ascertain newcomer adjustment.

Hypothesis 2 predicted that fluid intelligence measured pre-appointment would positively predict future role breadth self-efficacy. While this hypothesis was plausible, it was not supported by either the NZ Police or graduate group. In line with Hypothesis 3, job interest was shown to have a positive impact on role breadth self-efficacy inside the NZ Police and graduate group, and to remain stable across both hypothesised and modified structural models. Finally, in line with Hypothesis 4, proactive personality did predict role breadth self-efficacy inside the graduate group, albeit this was a weak relationship in the hypothesised and modified structural model. Counter to expectations, having a proactive personality did not lead to an elevated level of role breadth self-efficacy for NZ Police recruits.

Hypotheses 1 to 4: Interpretation of Results

The present study supports the work of Bandura (1986) who suggests that an individual's prior work success (i.e., 'enactive mastery') is one of the most significant factors influencing future self-efficacy. In other words, if an individual has successfully completed a task in the past, he or she could reasonably expect to successfully perform that task in the future. Based on the work of Beyer and Hannah (2002) it also appears that employees with a diverse range of experiences will have had a greater opportunity to acquire some raw materials to assist their adjustment to a new setting. Adkins (1995) recommends a degree of caution however, since individuals with previous work experience are at risk of developing a 'false confidence', and thereby becoming ''less attentive to formal instructions and organisational cues'' (p 856). In the present study, this false confidence may have contributed to police newcomers with substantial work experience (i.e., in more than three jobs), missing important job-related information. In turn, this may have led to a reduction in performance and lower feelings of self-efficacy.

A handful of studies support the link between job interest and higher levels of self-efficacy (Lent et al., 1996; Nauta et al., 2002; Tracey, 2002). The present study reinforces this small, important body of work by showing that job interest is also a significant predictor of role breadth self-efficacy for both police and graduate newcomers. Perhaps the strength of this relationship has come about because both groups entered a profession or industry they were drawn towards and which required a considerable investment pre-selection. With an interest in their chosen career, each newcomer then exerted effort towards that activity, thereby leading to an increase of

skill and self-efficacy beliefs. The present study extends previous research by showing that the link between job interest and role breadth self-efficacy is stable across two distinct adult samples. This is in contrast to previous research that has focused exclusively on school-age (Tracey, 2002) or college students (Lent et al., 1996; Nauta et al., 2002) and with a more generalised measure of self-efficacy.

In the present study, proactive personality was found to link to role breadth self-efficacy, albeit just among graduate newcomers. In line with Grant and Ashford (2008) and Griffin et al., (2000) it would seem that under situational conditions of accountability, ambiguity, and autonomy, the need for proaction is likely to increase. At such times, a newcomer is not pressured to think, feel, or act in a prescribed manner, but may still be driven to understand, control, and influence their environment (Ashford & Black, 1996; Morrison, 1993b; Wanberg & Kammeyer-Mueller, 2000).

Hypotheses 1 to 4: Unexpected Findings

As already discussed, a number of unexpected relationships were found among individual-level variables, and across the NZ Police and graduate group. Firstly, despite prior evidence supporting the link between fluid intelligence and role breadth self-efficacy this relationship was not supported by either group. In line with Sternberg and Hedlund (2002) it is possible that other forms of intelligence, most notably practical intelligence, might have predicted newcomer role breadth self-efficacy more effectively than fluid intelligence. These authors define practical intelligence as the 'common-sense' or 'street-smarts' an individual needs to adopt in order to succeed in everyday life. Phillips and Gully (1997) and Chen et al., (2001) also suggest that other more general or specific measures of cognitive ability might differentially impact on self-efficacy. In addition, the present study made no attempt to control for task complexity, even though the influence of cognitive ability on self-efficacy is likely to vary as a consequence of performing simple or complex tasks (Chen et al., 2001; Gist & Mitchell, 1992).

For the NZ Police group, the absence of a relationship between proactive personality and role breadth self-efficacy was also unexpected. It is plausible, however, that the level of ambiguity was so low or the need for autonomy was so reduced that the value of having a proactive personality was largely negated (Grant & Ashford, 2008;

Griffin et al., 2000). Since NZ Police recruits maintain their probationary status for 2 years, it is also plausible that individuals can defer taking responsibility for much longer than graduate newcomers. In addition, their initial mistakes might be excused for a longer period of time (Rollag, 2007).

A second unexpected finding for the NZ Police concerns the link from proactive personality to job interest, team support, and leader-member exchange. Brown et al., (2006) support the link between proactive personality and job interest since proactive individuals may have more employment options available to them pre-selection. With options, job seekers can select more satisfying jobs, as well as organisations that better fit their personal job interests and values. By definition, employees with a proactive personality are also predisposed to show initiative, take action, and interact with their environment (Bateman & Crant, 1993). Establishing a strong and supportive network with one's team and manager is therefore a highly salient way in which a newcomer can effect change within the organisation (Thompson, 2005).

The present study takes this analysis one step further by showing that the relationship with organisational insiders provides an important conduit through which the proactive employee can develop his or her role breadth self-efficacy and step beyond formal job expectations. For the graduate group, the link between proactive personality and group fit was also unexpected. Wanberg and Kammeyer-Mueller (2000) support this finding however, by suggesting that proactive, self-starting behaviour is important in achieving social integration within an organisation. Hall (1996) concurs, suggesting that the most successful employees of the future will have strong relationship skills and be team orientated.

Finally, for the NZ Police an unexpected, but plausible research finding concerns the link between job interest and task mastery. McHenry, Hough, Toquam, Hanson, and Ashworth (1990) support this finding however, having found that job interest was the best predictor of technical task proficiency ($r = .35$) and combat proficiency ($r = .34$) for enlisted soldiers.

Hypotheses 1 to 4: Practical Implications and Future Study

In the present study, the impact of four individual-level variables on role breadth self-efficacy was considered. Results highlight the conditions under which an organisation can best take advantage of these variables in the socialisation of police recruits and graduate newcomers. Firstly, results suggest that proactive personality may not always contribute to feelings of increased self-belief, but there is much an organisation can still do to capitalise on one's proactive disposition pre- and post-selection. For example, proactive individuals may have more well-defined career interests. This should not only allow them to select a more satisfying job, but select an organisation that provides a supportive team and leader-fit. The present study also suggests that the benefits derived from having a proactive personality may be environmentally-bound (i.e., it has an influence via team support and leader-member exchange).

Secondly, the present study goes some way to corroborate a new stream of research that supports a link between job interest and self-efficacy (Lent et al., 1996, Nauta et al., 2002; Tracey, 2002). These findings suggest that to enhance role breadth self-efficacy, an organisation may benefit from intervening at the level of interests, and do so early on in one's organisational tenure. For example, on entering an organisation, employers might usefully increase newcomer self-belief by providing success experiences, stimulating opportunities to learn, or by facilitating engaging demonstrations. Going forward, it would also be useful to explore the interest to role breadth self-efficacy link in the context of other variables which might have influenced this relationship. For example, it is possible that a powerful role model (Nauta et al., 2002) or one's personal estimate of effort, teaching quality, and relevance (Lent et al., 1996) each had an impact on self-efficacy. These relationships are worthy of future consideration, since ability and non-ability variables do impact on one's self-efficacy appraisal (Bandura, 1986).

Thirdly, as one of the most commonly studied variables in the personnel domain (Tesluk & Jacobs, 1998), work experience was well deserving of consideration in the present study. What makes this study unique is that it highlights the *equal* importance of both job quantity and quality in explaining future role breadth self-efficacy. Work is much more than simply the length of time spent in a job (Tesluk & Jacobs, 1998). As

such, by integrating both qualitative and quantitative dimensions, the present study goes some way to better understanding the complexity of work experience and how different components interact over time.

In conclusion, the present study provides an initial attempt to examine the conditions under which prior work experience, job interest, fluid intelligence, and proactive personality are associated with role breadth self-efficacy. Findings show that in order to capitalise on the contribution of each variable to perceptions of competence, organisations may need to explore these relationships in the context of other individual and environmental conditions. The impact of one's group and manager on newcomer role breadth self-efficacy is discussed in the next section.

The Effect of Group and Manager Predictors on Newcomer Adjustment

Hypotheses 5 and 6: Review of Results

In line with Hypothesis 5, results found that support from more experienced team members positively predicted role breadth self-efficacy among NZ Police and graduate newcomers. While this was a weak relationship across both groups, it did remain stable in both the hypothesised and modified structural models. This study also corroborates prior research that suggests a high-quality relationship with one's manager is a powerful determinant of newcomer adjustment (Anakwe & Greenhaus, 1999; Katz 1980; Miller & Jablin, 1991), as expressed in Hypothesis 6. For both the NZ Police and graduate group, the relationship with one's manager appeared to be more predictive of subsequent role breadth self-efficacy than more experienced team members. While the magnitude of this relationship was marginally stronger inside the graduate group, it again remained reasonably stable across both the hypothesised and modified NZ Police and graduate models.

Hypotheses 5 and 6: Interpretation of Results

Confirmation in the present study that experienced team members and management positively predicted role breadth self-efficacy is consistent with other research highlighting the criticality of organisational insiders in the socialisation process (Louis et al., 1983; Major et al., 1995; Miller & Jablin, 1991; Ostroff & Kozlowski,

1992; Settoon & Adkins, 1997). These studies confirm that successful adjustment occurs through a process of mutual interaction between newcomers and organisational insiders, and that both supervisors and experienced team members have an important role to play in facilitating newcomer adjustment.

As shown in the present study however, there is value in differentiating between sources of socialising influence, since SEM analysis showed a positive exchange with one's manager ($ßs$ = .214 to .318, ps < .001) had a marginally stronger influence on newcomer efficacy than experienced team members ($ßs$ = .177 to .188, ps < .001 to < .05). The role of one's manager in increasing employee self-efficacy already has support (Chen & Klimoski, 2003; Gomez & Rosen, 2001; Schyns et al., 2005). What is less clear from previous research is why experienced team members might have less influence than one's manager on the future efficacy of their newcomer colleagues. What we do know is that, among seasoned newcomers at least, individuals might already be aware of what is expected of them, and as such, require less socialising support (Saks et al., 2007).

In an individualised environment, it is also plausible that newcomers may be deterred from forming new relationships with team members who act as though the newcomer is not accepted by the group (Griffin et al., 2000). The importance of referent information and performance feedback early on in one's organisational tenure also suggests that supervisors may be given initial prominence over experienced team members as a source of information and learning (Morrison, 1993a). While the present study does not discount the role of the experienced insider, it does suggest that there is variability in the influence of this group that can be attributed to prior work experience and length of tenure.

Leader-member and team-member research also sheds some light on the relative importance of one's manager and experienced team members in newcomer adjustment. A fundamental difference between these relationships is that at a team level, the relationship is expected to involve multiple individuals, and involve relationships of varying quality (Sherony & Green, 2002). As a result, a single low-quality relationship might detrimentally affect one's overall work experience, despite multiple positive exchanges being held with other team members. Confronted with this situation, a

newcomer is expected to experience a high level of behavioural uncertainty which parallels concerns about self-efficacy (Jones, 1986). In turn, this could explain the lesser impact of team support on newcomer role breadth self-efficacy in the present study.

Of course, this does not imply that socialisation research can afford to ignore the role of the experienced team member during newcomer adjustment. The behaviour of both one's manager and colleagues is important to understanding how newcomers adjust to a new organisation. In the next section, some of the unexpected group and manager relationships found in the present study are discussed in more detail.

Hypotheses 5 and 6: Unexpected Findings

The leader-member exchange and team support variables both showed relational patterns that were unexpected. With regards to the NZ Police, a supportive team culture was found to predict a more positive exchange with one's instructor. In turn, a positive leader-member exchange predicted greater role clarity and group fit among police newcomers.

Cogliser and Schriesheim (2000) verify the link between team support and leader-member exchange. In a multi-level study exploring team-member and leader-member exchange, they found that individuals in a cohesive work group also tended to experience better relationships with their supervisors. An explanation for this finding is provided by Liden et al., (2000) who suggest that in a cohesive work group, individuals are more willing to assist others to perform. Elevated employee performance should in turn, facilitate a leader's expectations of staff competence and the development of a stronger leader-member exchange (Liden et al., 1993). On the basis of the present study, it is plausible that team-level support did help establish a strong leader-member exchange by facilitating the success of individual team members.

In line with the present study, other researchers have found that a high quality leader exchange is positively related to role clarity (Gerstner & Day, 1997; Harris, Harris, & Eplion, 2007), and negatively related to role conflict (Gerstner & Day, 1997). Indirectly, support for this link is also provided by Mueller and Lee (2002) who found that subordinates in high-quality leader relationships also enjoyed greater

communication satisfaction across interpersonal, group, and organisational contexts. It would seem that when faced with role pressure, these newcomers were able to talk with their manager and thereby lessen any source of role conflict.

Whereas a positive exchange with one's instructor predicted role clarity for NZ Police recruits, a slightly different pattern of relationships were found for the graduate group. Most notably, one's manager and experienced team members both emerged as important facilitators of newcomer role clarity. As discussed, the link between leader-member exchange and role clarity is well established (Gerstner & Day, 1997; Harris et al., 2007), while preliminary evidence also supports the link between experienced team member support and role clarity (Anakwe & Greenhaus, 1999).

Hypotheses 5 and 6: Practical Implications and Future Study

There are several research strands arising from the present study that are worthy of further exploration. Firstly, it appears that the influence of both managers and team members must be considered in consort with each other if we are to truly assess their relative impact on newcomer socialisation. In the present study, support from more experienced team members was found to facilitate a stronger leader-member exchange. Preliminary evidence suggests that the inverse of this relationship might also exist; that leader-member relationships can influence the quality of team-member interactions (Tierney, Bauer, & Potter, 2002). On the basis of this evidence, it seems there is an interdependence between leader-member and team-member relationships that play on one and another and ultimately link to newcomer work attitudes. This interdependence has implications for the socialisation of newcomers within the first few days of their tenure. For example, it would be useful to examine how newly formed team-member and leader-member relationships impact on the expectations of a newcomer immediately post-appointment.

As discussed, we know that newcomers seek different types of information in order to learn role requirements and make sense of their new environment (Morrison, 1993a; Ostroff & Kozlowski, 1992). What we do not know however, is how the perceived quality of information, and situational or contextual variables might influence the relationship with one's manager or more experienced team members. While preliminary research has found that affective variables can be important in the

development of insider relationships (Liden et al., 1993), it is only with additional research that we will determine the relative importance of contextual effects or individual differences on insider relations (Cogliser & Schriesheim, 2000).

In summary, this study has gone some way to show that the socialising influence of one's manager and experienced team members operate in tandem to support newcomer role breadth self-efficacy. This study also extends previous research by reinforcing the differential impact each predictor variable has in the adjustment process.

The Longitudinal Pattern of Proactive Behaviour across Intervention Groups

Hypotheses 7 to 10: Review of Results

In line with Hypothesis 7, results found that NZ Police newcomers reported a stable pattern of proactive behaviour for the duration of their time at Police College. On entering the field, proactive behaviour immediately and dramatically increased across all intervention groups and in a consistent pattern. Regardless of intervention, no difference was found in the pattern of proaction among police recruits. In line with Hypothesis 8, graduate newcomers reported an overall decline in proactive behaviour between T1 and T4. This drop was of a large magnitude, and again, showed no difference between intervention groups. On the basis of these results, it would appear that proactive behaviour does unfold differently for newcomers socialised in a more institutionalised versus individualised environment.

Hypothesis 9 and 10 predicted that the pattern of proactive behaviour reported by police and graduate newcomers would also be observable to police instructors and graduate managers. While graduate managers did observe an overall decline in graduate proaction over time, they did not observe any difference in the pattern of decline for graduates who partook in proactive training versus those who did not. With police recruits, instructors observed a downward trend in proactive behaviour across all intervention groups between T1 and T3. This was with the exception of the placebo group, which showed a significant upward trend across the same time period.

Hypotheses 7 to 10: Interpretation of Results

Prior research supports the longitudinal pattern of proactive behaviour as reported by NZ Police and graduate newcomers. When newcomers encounter ambiguity, they are generally motivated to reduce it by engaging in proactive behaviour (Ashford & Black, 1996; Crant 2000; Grant & Ashford, 2008; Wanberg & Kammeyer-Mueller, 2000). Research has also shown that newcomers will engage in proaction when given the autonomy to think and act in non-prescribed ways, including problem-solving and idea implementation (Parker et al., 2006), and role expansion (Axtell & Parker, 2003). Each of these conditions is more typical of an individualised environment and supports the elevated level of proactive behaviour reported by graduates at T1 of employment.

On entering the workforce, it is also conceivable that newcomers in an individualised environment are information deficit and need to engage proactively with their environment in order to reduce uncertainty (Miller & Jablin, 1991). In contrast, it is not until a police recruit enters the front-line that any information deficit is likely to be realised. At this time, police recruits in the present study demonstrated an increased level of proaction, and paralleled graduate newcomers entering the workforce for the first time.

Hypotheses 7 to 10: Unexpected Findings

There were a number of unexpected findings in the present study with regards to the pattern of proactive behaviour observed by others. Although NZ Police newcomers reported a longitudinal pattern of proactive behaviour that was consistent with prior research, this pattern was not wholly endorsed by police instructors. Counter to expectations, instructors observed an overall decline in proaction by recruits in both the training and control groups, while the placebo group was observed to increase in proactivity.

One plausible reason for the disconnection between newcomer and instructor ratings of proaction was that instructors were only asked a subset of items asked of recruits. Because of the unreliability of asking instructors to rate behaviour they could not reliably observe, police instructors were asked to rate three behaviours only (i.e., asking questions, feedback-seeking, and listening). As a consequence, instructor ratings

against a narrow set of behaviours could never provide a complete explanation of all proactive behaviours displayed by police recruits during training.

A second possibility for the disconnection between instructor and recruit ratings of proaction is that both groups interpreted specific proactive behaviours from a different frame of reference. In line with Grant and Ashford (2008), the concept of proaction describes a particular process that can occur within or beyond the boundaries of an employee's role. For example, what was considered proactive behaviour to a recruit, could have been interpreted as simply 'doing one's job' by a police instructor if his or her frame of reference was to seek more extra-role proaction. Because proactive behaviour can also involve questioning accepted practices, it may not always be positively received by supervisory staff (Frese, Fay, Hilburger, Leng, & Tag, 1997).

A third possibility for the inconsistent recruit-instructor ratings is that instructors simply didn't have enough opportunity to obtain an accurate estimate of recruit behaviour. Because a frequency measure was used to ascertain newcomer proaction, instructors were required to note the actual number of times they observed a specific behaviour daily, weekly, or fortnightly. The advantage of this mode of rating is that it standardises responses across individuals (Morrison, 1993b), but is potentially less effective when comparison is made between self-rater and observer. Parker et al., (2006) also acknowledge the inherent difficulties attached to gauging employee proactivity from other sources, such as supervisors. In particular, they suggest that some supervisors might be prompted by an egocentric bias to rate their staff favourably in terms of proactive behaviour. In turn, an employee might be prompted to behave more proactively simply as a consequence of being observed, with the net effect being that an inaccurate estimate of newcomer proaction is obtained.

A second unexpected finding revolves around the amount of proactive behaviour demonstrated by NZ Police and graduate newcomers post-training participation. Explicitly, among graduate newcomers, no longitudinal difference in proaction was shown in either self or manager ratings among the group who received training versus a control group who did not. While NZ Police instructors observed a significantly higher level of proactive behaviour among the training group when compared to a control and leader-member exchange group, they observed significantly less proaction from the

training group when compared to the placebo group. Self-ratings of proaction among police recruits also failed to show any significant difference on the basis of intervention group. These findings were counter to hypotheses and inconsistent with prior research (Axtell & Parker, 2003).

For the graduate group, the delivery of a training intervention over a single day is expected to have lessened an individual's retention of information. In line with Arthur et al., (1998), graduates are likely to have retained the greatest amount of training in the day immediately after training delivery, yet will have lost an estimated 92% of initial performance levels 12-months post-training delivery. It is also likely that with a single day of training graduates had insufficient time to develop a shared transactive memory and an awareness of 'who knew what'. With a shared memory, individuals who have been trained collectively can turn to each other for help (Moreland & Myaskovsky, 2000). Since graduate training was consistently delivered within the first 5 days of tenure, it is likely that newcomers were still finding out about each other, while at the same time experiencing anxieties about acceptance, interpersonal conflict, and uncertainty (Moreland & Myaskovsky, 2000).

A number of other conditions may have also inhibited the transfer of proactive behaviour back to the workplace for graduate newcomers. While interested in self-development (Eisner, 2005), Gen Y employees are thought to respond the most effectively to a customised training programme that meets their personal development needs (Martin, 2005, as cited in Broadbridge et al., 2007). The delivery of more generalised training content may have therefore been perceived to have little value; thereby minimising its transfer back to the workplace. Collectively, prior research suggest that training transfer is dependent on more than the quality of training delivery; but is, in part, also dependent on the environmental conditions in which it is positioned and delivered.

For the NZ Police group, instructors were not expected to observe a higher level of proactive behaviour by the placebo group when compared to recipients of proactive training. Prior to any course delivery, it was agreed that placebo group members would receive study skills training support, with all course content agreed in advance with an NZ Police behavioural expert. By the conclusion of course delivery, it became apparent

that a large proportion of course material was on the proactive, self-directed nature of study activity. While not intended, it is likely that the placebo group was an applied proactive training intervention. It is understood that in the delivery of course content, the placebo group was provided direction, among other things on how to ask questions, seek feedback and network, as well as the benefits of observing the tactics demonstrated by the more studious members of each wing.

The dramatic increase in proactive behaviour observed by the placebo group between T1 and T3 is not surprising since the trial and error practicing of behaviours is likely to be a far more valuable source of learning than simply being told relevant information (Ostroff & Kozlowski, 1992). Considerable support also exists for the notion that learning occurs through observing role models who show effective strategies for dealing with difficult situations and then modeling that behaviour (Bandura, 1986; Filstad, 2004; Gibson, 2004; Van Maanen, 1978). According to Arthur et al., (1998) the retention of skills is also enhanced if course content is highly similar to what is required on-the-job. For the NZ Police placebo group, there was indeed a close match between the training and retrieval environments, thereby minimising skill decay and forgetting.

Another unexpected finding in the present study concerns the NZ Police leader-member exchange group. Based on prior research, a supportive, feedback-rich environment was hypothesised to facilitate effective learning (Stothard & Nicholson, 2001), and a more proactive outlook (Marrone & Taylor, 2004). Contrary to expectations, NZ Police instructors rated the leader-member exchange group as consistently exhibiting less proaction than the control group. One plausible explanation for this finding is that recipients can build up a reliance on feedback (Schmidt & Wulf, 1997). This reliance can reduce individual development (and thereby proactive behaviour) when it is removed. While it was not possible in the present study to verify newcomer reliance on feedback and direction, it does suggest that the aim of any training intervention should be to provide sufficient feedback to improve performance without producing dependency (Stothard & Nicholson, 2001).

The power of police instructors as a force in affecting newcomer proaction could also have been diminished if they missed the opportunity to praise evidence of new learning or failed to provide a safe, affirming environment for the practice of newly

acquired behaviours. Finally, if an instructor failed to behave in ways congruent with training objectives, they are expected to have detrimentally affected the transfer of training ideals (Baldwin & Ford, 1988).

Hypotheses 7 to 10: Practical Implications and Future Study

The present study has provided a rich source of information concerning the longitudinal pattern of proactive behaviour among NZ Police and graduate newcomers. It has also served to highlight the importance of thorough pre-planning in the design of any training intervention to ensure maximum success. While there is a number of training inputs over which one has little control (e.g., newcomer ability, personality, and motivation), there is a number of environmental and training factors which can be controlled to enhance learning and retention (Baldwin & Ford, 1988).

In the present study, the finding that placebo group members demonstrated a higher level of proaction relative to all other groups highlights the importance of using more 'real-world' tasks in the study of complex, cognitive skill acquisition. Relatedly, for newcomers in the placebo group, attendance at training provided the dual benefit of acquiring some new skills, while imparting the knowledge required for enhanced performance on future exams. It therefore seems reasonable that when the motivation to learn is high, the long-term retention of skills will be maximised (Baldwin & Ford, 1988).

The potential for supervisory staff and peers to undermine the initial learning and retention of training highlights some important implications for future study. In particular, it highlights the need for strong, positive role models to influence training transfer (Hatala & Fleming, 2007), and to model the desired behaviours (Baldwin & Ford, 1988). Secondly, it highlights the importance of providing newcomers with the opportunity to practice newly acquired skills, and to provide praise and reward for skill use.

There is no doubt that technology is playing an increasing role in the delivery of organisational training interventions (Salas & Cannon-Bowers, 2001). For the graduate group, the delivery of training via email should not have inhibited training uptake (Aragon, Johnson, & Shaik, 2002). If this study is replicated, more could be done to

expand the use of the web to support more effective learning (Neuhauser, 2002). In the future, there is also tremendous scope to combine the training and distance learning literatures and explore the conditions that facilitate the greatest uptake of new learning via an online medium. Questions around the pace of learning and the ideal combination of delivery aids still exist (Salas & Cannon-Bowers, 2001). The relative usefulness of distance learning versus more collaborative group learning is also unclear, even though we know that certain features of group interaction should benefit the learning process (Moreland & Myaskovsky, 2000).

The Impact of Training as a Moderator in Newcomer Socialisation

Hypothesis 11: Review of Results

Consistent with Hypothesis 11, training did moderate the relationship between role breadth self-efficacy and proactive behaviour. This relationship existed for the NZ Police group only; with training shown to stimulate the highest level of proaction among recruits with an elevated level of self-belief. Without training, role breadth self-efficacy had a non-significant relationship with future proaction.

Hypothesis 11: Interpretation of Results

Results in the present study support the growing body of research that has found a link between role breadth self-efficacy and proactive behaviour (Axtell et al., 2000; Parker et al., 2006; Ohly & Fritz, 2007) that can be enhanced via training (Axtell & Parker, 2003). Collectively, these studies challenge previous research that have assumed proactivity to be constant over time (Ashford & Black, 1996; Bateman & Crant, 1993; Morrison, 1993a; Seibert et al., 1999).

The present study not only reinforces, but extends the work of Parker et al., (2006), by showing that the impact of training on newcomer proaction will be most potent for individuals with an elevated level of role breadth self-efficacy. This finding is in line with Saks (1995) who also found that training effectiveness was influenced by the strength of each newcomer's self-efficacy. Unlike Saks however, the present study found that training most benefited newcomers with a strong self-efficacy, rather than newcomers with a weak sense of self-belief. In support of research findings, Saks

argues that an individual with low self-efficacy should benefit from the guidance and instruction that training provides moreso than a self-sufficient individual with a strong sense of self-efficacy. While a plausible explanation, there is also support for the idea that training effectiveness involves a positive assessment of one's personal capability to engage in a range of job-relevant activities (Parker et al., 2006). Future study will go some way to establishing the relative merits of both arguments. However, what is clear from the present study is that socialising practices may not only be differentially available to newcomers (Louis et al., 1983), but may also be differentially effective for newcomers (Wanous & Collella, 1989).

Hypothesis 11: Unexpected Findings

Contrary to Hypothesis 11, training did not moderate the relationship between role breadth self-efficacy and proactive behaviour for graduate newcomers. Multiple reasons have already been provided in 'Hypotheses 7 to 10: Unexpected Findings' as to why training might have played a lesser role with graduates. These include; (a) the shortened timeframe for training delivery, (b) the reduced opportunity for learning retention, (c) the absence of a shared transactive memory, and (d) the delivery of more generalised training content.

Hypothesis 11: Practical Implications and Future Study

The results of the present study extend previous research into the link between newcomer role breadth self-efficacy and proaction within the first 2 years of employment, and how this relationship can be facilitated via training. At its core, the present study confirms the usefulness of a training intervention that is aimed at enhancing proactive behaviour, and ultimately developing the potential of staff. Previously, Parker (1998) found that training aimed at enhancing employee suggestions for improvement, cost-awareness, and team working was an ineffectual aid to newcomer adjustment. By using an intervention that incorporated a broad range of proactive tactics however, the present study found training to have a significant impact on newcomer role breadth self-efficacy and proaction.

Secondly, this study suggests that for training to be its most potent, some preliminary work may also need to be done to build employees' perceptions of their own capability. Research has found that self-efficacy beliefs can be strengthened

through a number of experiences, such as performance mastery, verbal persuasion, vicarious learning, and emotional arousal (Bandura, 1986). By incorporating these experiences into the training process, organisations should be able to strengthen newcomers' self-efficacy beliefs and ultimately their adjustment. Since the training received by NZ Police and graduate newcomers was in a lecture-style with discussion, it is likely that the inclusion of more vicarious and mastery experiences (such as that experienced by placebo group members) could have had a more impressive impact on newcomer adjustment.

What is less clear from research to date is the relative usefulness of each experience and the optimal time frame for its introduction (Haccoun & Saks, 1998). For example, verbal persuasion and physiological arousal are likely to be most effective for strengthening self-efficacy prior to, and after training, while mastery experiences and vicarious learning should be most effective during training. Going forward, there is also scope to tailor training programmes to better reflect the pre-training self-efficacy level of trainees. For example, behavioural modeling (Gist, Schwoerer, & Rosen, 1989) and formal orientation programmes (Saks, 1994) have been found to be particularly effective for trainees with low self-efficacy. Thus an important direction for future research might be to investigate the development of self-efficacy as a deliberate training intervention as well as a desired training outcome.

Beyond contributing to the literature on newcomer socialisation, the present study goes some way to clarifying why proactive people actually succeed. It would seem that proactive people *expect* to be successful when they engage in a proactive pursuit, thereby making this behaviour more likely (Parker et al., 2006), and a training intervention more useful. It would seem that role breadth self-efficacy is an important variable for understanding newcomer adjustment as well as training effectiveness.

<u>Linking Role breadth Self-Efficacy and Proximal Indicators of Adjustment</u>

<u>Hypotheses 12 to 14: Review of Results</u>

Consistent with Hypotheses 12 and 13, role breadth self-efficacy was a critical component of newcomer adjustment, linking positively to task mastery and group fit.

While stronger inside the graduate group, both relationships remained reasonably stable for graduate and NZ Police recruits in both the hypothesised and modified structural models. On the basis of these results it would seem that newcomers with stronger self-efficacy beliefs are more likely to exert the effort required to overcome obstacles and achieve desired outcomes.

Hypothesis 14 predicted that role breadth self-efficacy would also contribute to a higher level of role clarity. Because individuals with greater self-efficacy are more likely to attain desired outcomes, they are, by necessity, expected to have a greater understanding of job expectations and responsibilities (Bandura, 1986, 1997). For the NZ Police however, this link was the weakest of all tested in the hypothesised structural model and was removed when model modifications were made. For the graduate group, the correlation between role breadth self-efficacy and role clarity was of a moderate magnitude in the hypothesised structural model, but once again, became non-significant with model modifications.

Hypotheses 12 to 14: Interpretation of Results

Multiple studies have highlighted the criticality of role breadth self-efficacy in newcomer adjustment (Axtell & Parker, 2003; Ohly & Fritz, 2007; Parker et al., 2006). The present study supports this research by showing a direct link between role breadth self-efficacy and two proximal outcomes of socialisation; namely task mastery and group fit. Of these links, the relationship between role breadth self-efficacy and task mastery was stronger for both the NZ Police and graduate group. This is understandable, given that the concept of self-efficacy is intended to capture the extent to which staff feel capable of carrying out a broader and more proactive role (Parker, 1998) Task-related self-efficacy has also been found to increase effort and persistence (Barling & Beattie, 1983), while decreasing performance anxiety (Bandura, 1997).

Bandura (1986) also provides some evidence that is relevant in explaining why the link between role breadth self-efficacy and group fit was weaker for the NZ Police and graduate group. Specifically, he suggests that when assimilation outcomes are achieved through interdependent actions, an individual has to rely on others to find out how he or she is doing. As a consequence, one's estimate of group fit is likely to be more socially dependent and thereby prone to misjudgement. That said, Bandura (1999)

does not discount a link between self-efficacy and group fit and observes, "If people are to work together successfully, then members of a group have to perform their roles with a high sense of efficacy" (p. 227). More recent, empirical support for this link has been provided by Gruman et al., (2006). The current study extends these findings by showing that role breadth self-efficacy is important for successful task mastery as well as group fit in both an institutionalised and individualised work environment.

Hypotheses 12 to 14: Unexpected Findings

In the present study, role breadth self-efficacy was a weak predictor of role clarity inside the NZ Police, and was a moderate predictor of role clarity inside the graduate group. With structural modeling, this link was removed from both groups. A plausible explanation for this finding is presented by Bandura (1997), who suggests that self-efficacy assessments are rarely inclusive of all job aspects. As such, the 'true' relationship between role breadth self-efficacy and role clarity may have been underestimated in the present study. Further research is therefore warranted to ascertain the extent to which the self-efficacy measures used in the present study fully captured the variety of skills, behaviours, and information inherent in one's job.

Hypotheses 12 to 14: Practical Implications and Future Study

In conclusion, the present study constitutes a step toward better understanding how role breadth self-efficacy contributes to more effective work practices by organisational newcomers. In particular, it demonstrates that newcomers with an elevated level of role breadth self-efficacy will (a) enjoy a higher level of task mastery and (b) integrate more effectively into the work group. These findings suggest that role breadth self-efficacy is a critical prerequisite for building competitive advantage by facilitating a self-directed workforce who expects success.

In terms of future areas for research, it would be interesting to assess the longitudinal pattern of task mastery and group fit for newcomers with high and low role breadth self-efficacy. More research is also needed to clarify the link between proaction, role breadth self-efficacy, and role clarity. Initial research by Brown et al., (2001) suggests that employees with high self-efficacy seek, integrate, and use information more effectively (i.e., proactively) to increase role clarity. This research

suggests that both self-efficacy and an information-rich workplace are critical in the development of a self-directed, proactive workforce.

<div align="center">Linking Proximal Indicators of Adjustment and Distal Outcomes</div>

Hypotheses 15 to 17: Review of Results

Task mastery is an important correlate of newcomer adjustment as evidenced by the positive relationship between task mastery and performance outlined in Hypothesis 15. This relationship held for both the NZ Police and graduate group, albeit the relationship was stronger for the graduate group. As predicted in Hypothesis 16, role clarity was related to organisational commitment, although this relationship existed for the NZ Police only, and not for graduate newcomers. For the police group at least, the positive relationship between role clarity and organisational commitment suggests that individuals who have a clear sense of their job responsibilities will have more positive feelings toward the wider organisation.

In line with Hypothesis 17, group fit was also a critical variable in the present study in terms of supporting newcomer long-term adjustment. Advancing previous literature, police and graduate newcomers who felt accepted by the group also tended to experience a higher level of job performance and expressed a greater commitment to stay with the organisation. Thus, it would seem that a sense of group belonging does predict a higher level of individual performance and a greater desire to fit into the organisation as a whole.

Hypotheses 15 to 17: Interpretation of Results

A growing body of empirical research emphasises the importance of task mastery, role clarity, and group fit in the achievement of two important indicators of newcomer adjustment, namely performance and commitment. Collectively, these studies confirm the usefulness of the conceptual model provided in Model A (Figure 1) as a framework for exploring the transition from proximal to distal outcomes of adjustment.

In the present study, task mastery positively predicted future performance for both police and graduate newcomers. These findings support the notion that both an institutionalised and individualised environment can facilitate newcomer performance. Whereas an institutionalised setting may engender a sense of competence (Allen, 2006) an individualised environment may facilitate a positive, internal work motivation (Feldman, 1981). The link between task mastery and performance has support from others (Adkins, 1995; Bauer & Green, 1994; Chen & Klimoski, 2003; Ostroff & Kozlowski, 1992). It would seem that individuals who have mastered their work tasks may gain a greater sense of accomplishment and feel motivated to continue, thereby supporting higher levels of performance. Any decisions about the relative importance of an individualised or institutionalised environment in facilitating the link between task mastery and performance must be made with a degree of caution. Whereas this link was tested with the NZ Police sample using robust structural modeling, a reduced graduate dataset meant testing this link using correlational analysis. Going forward, there is scope to qualify these findings on the basis of a more fine-grained and equivalent analysis.

In the present study, role clarity was a positive predictor of organisational commitment for NZ Police recruits. Other studies of newcomer adjustment support this relationship (Adkins, 1995, Allen, 2006; Ashforth & Saks, 1996; Mignerey et al., 1995; Ostroff & Kozlowski, 1992; Van Maanen & Schein, 1979). Collectively, these studies suggest that employees who understand their role expectations should know where to direct their efforts and experience less anxiety and uncertainty as a result. Inside an institutionalised environment, this sense of purpose and certainty was related to an increase in organisational commitment.

In addition to task and role-related adjustment, a newcomer must develop a sense of inclusion and fit with the activities of the group in which they work. In the present study, group fit was a significant predictor of organisational commitment among NZ Police and graduate newcomers. In an institutionalised setting, insiders provide a common message about the organisation, roles, and appropriate behaviour. In turn, this common message appears to have led to a greater sense of shared values (Cable & Parsons, 2001), and reduced the likelihood of voluntary leaving (Allen, 2006). In contrast, graduate newcomers are not afforded the same formalised, insider relationships

in an individualised setting. As a generational group however, Gen Ys are known to have initiative, to be curious, and to value team work (Eisner, 2005; Gursoy et al., 2008). Other researchers have found that newcomers with a strong group network (Morrison, 2002), knowledge of group functioning (Ostroff & Kozlowski, 1992), and opportunities for social integration (Wanberg & Kammeyer-Mueller, 2000) will also identify with the organisation as a whole.

Successful assimilation into the work group also emerged as a significant predictor of NZ Police and graduate performance. Prior research supports this link, having shown that newcomers with a strong group identity have a better understanding of performance issues (Louis, 1980; Louis et al., 1983) and perform at a higher level (Bauer & Green, 1994; Feldman, 1976). It is important when interpreting the link between each proximal and distal measure to consider the time lag in place. More specifically, this gap was 10-months for the NZ Police, but only 6-weeks for the graduate group. Since the magnitude of a correlation is known to decrease over time (Nunnally & Bernstein, 1994) the modest correlation between group fit and performance for the NZ Police ($r = .15$, $p < .05$) is understandable. Larger correlations are generally found for variables assessed in close proximity to each other (Bauer et al., 2007), thus making the weak correlation between group fit and performance ($r = .27$, $p < .01$) for graduate newcomers somewhat surprising.

Hypotheses 15 to 17: Unexpected Findings

In the present study, a number of unexpected relationships among proximal variables were found. Firstly, group fit was found to have a positive relationship with role clarity and task mastery inside both the NZ Police and graduate group. Fisher's (1986) research supports this link, suggesting that the establishment of successful work relationships is necessary for learning about one's new role and expectations. More recently, Anakwe and Greenhaus (1999) suggest that the work group will provide a newcomer with access to more experienced insiders who can facilitate newcomer mastery of job tasks and clarity around role expectations and norms. Research on leader-member and team-member exchange has also shown that newcomers who enjoy a positive insider exchange are likely to receive more task and role-related information and support (Liden et al., 2000). Finally, newcomers with a smaller network of strong, interrelated (i.e., dense) contacts also enjoy greater job mastery and clarity with respect

to one's role (Morrison, 2002). Collectively, these findings suggest that newcomers become socialised not just by interacting with insiders, but by developing certain relationship configurations with this group.

The second unexpected finding was that role clarity had a positive link with task mastery inside both the NZ Police and graduate group. This finding suggests that a newcomer who has sufficient information about the responsibilities and objectives of one's job should complete their work with greater ease and skill. Support for this finding is provided by Kammeyer-Mueller and Wanberg (2003) who suggest that by providing a sense of direction and purpose to one's job, role clarity should lead to greater task participation. Adkins (1995) concurs, suggesting that a level of confidence about an organisation's rules and procedures is necessary for job performance.

The third unexpected finding was that role clarity did not predict commitment among graduate newcomers. A plausible explanation for this finding is offered by Menguc et al., (2007) who suggests that even though a newcomer may understand role parameters, they may still disagree with them. This is particularly the case for Gen Ys in an individualised environment, who, unlike their counterparts in a more institutionalised environment, do have the scope to question organisational systems, rules, and processes (Gursoy et al., 2008). Consequently, even if an organisation fulfills its obligations to a graduate newcomer, this may not be reciprocated with a more committed employee.

Hypotheses 15 to 17: Practical Implications and Future Study

Results in the present study suggest that while the tactics adopted by each organisation may differ, the adjustment outcomes for a newcomer socialised in a more institutionalised or individualised mode appear to be more similar than dissimilar. Firstly, with the exception of the link between role clarity and commitment for the graduate group, each proximal variable supported a distal outcome in the hypothesised manner (albeit quite modestly). Secondly, the present study demonstrates that group fit plays a critical role in the task mastery and role clarity of graduate employees as well as more seasoned newcomers. This finding supports recent theories arguing that the influence of the group is critical to overall newcomer adjustment (Moreland & Levine, 2001). Thirdly, a positive relationship between role clarity and task mastery was found

for both police and graduate newcomers. This suggests that individuals who have a clear sense of their job responsibilities are also better equipped to perform the tasks associated with their role, and that this is the case regardless of the socialising tactics adopted by one's employer.

Several authors have described organisational entry as a period of uncertainty (Kim et al., 2005; Miller & Jablin, 1991; Saks et al., 2007), during which time a number of task, role, and group demands confront a new employee. Whereas newcomers socialised in a more institutionalised mode are provided with considerable structure and direction, the responsibility for socialisation is placed more heavily on the newcomer in an individualised workplace. The assumption here is that the latter group is largely left to 'sink or swim' (Cooper-Thomas & Anderson, 2002). To the contrary, the present study suggests that newcomers entering an individualised workplace for the first time may actually *prefer* an element of role uncertainty and freedom from what they see as tight control and micro-management. Thus, in contrast to previous generations, graduate employees may not need a precise understanding of role expectations and standards to commit to an organisation. Instead, their commitment may stem from simply feeling included and respected by the workgroup. On the strength of these results, it appears that an individualised workplace can actually facilitate important distal outcomes not consistently attributed to this domain; namely performance and organisational commitment.

Going forward, increased emphasis needs to be placed on drawing together the traditional issues presented in the socialisation domain and the emerging research on Gen Y. Research to date suggests that Gen Ys have different experiences and work expectations compared to earlier generations. To realistically compete for future talented graduates, employers must therefore become aware of the characteristics of this generation, and engage actively with them so as to meet their needs (Broadbridge et al., 2007).

Psychometric Analyses of Newly Created Measures

The overall focus of the present study was to explore newcomer adjustment inside two distinct organisational groups. To support this aim, a total of six new, psychometric measures were established. In this section, the psychometric properties of each newly created measure is discussed; commencing with those measures that were consistent across both the NZ Police and graduate group (i.e., the prior work, job interest, and proactive behaviour measures). Measures that were unique to the police (i.e., the role breadth self-efficacy and performance scales) and graduates (i.e., the performance scale) are then discussed in turn.

Prior Work Experience Measure

In line with Marrone and Taylor (2004), the measure of prior work experience captured three distinct aspects of the prior work domain: newcomer confidence, previously acquired skills, and newcomer expectations. Study results showed this measure to have acceptable internal consistency reliability and to be generalisable across NZ Police and graduate newcomers. While there is scope for more fine-grained research to be done, preliminary evidence suggests that this measure also had good predictive validity, having been shown to link to role breadth self-efficacy 12-weeks into one's organisational tenure.

In terms of additional research, it would be useful to establish the utility of this measure at different phases of one's career. As an employee matures in the job they are likely to experience promotions, transfers, and re-assignments. Even for individuals who have not undergone significant role change, socialisation is an on-going and pervasive aspect of organisational tenure (Chao et al., 1994). Accordingly, the appropriateness of this measure for a newcomer facing formal job changes as well as those facing more subtle changes within an existing job and organisation is warranted.

Further item development would also be useful to ensure the content validity of this measure. For example, the inclusion of items that capture early life experiences, leisure activities, and outside interests (Adkins, 1995), as well as newcomers' various mental representations of work (Beyer & Hannah, 2002) are viable options for exploration. Research might also seek to better understand how individuals learn from

their prior experiences and what factors best predict this learning (Sternberg & Hedlund, 2002). Finally, ascertaining the predictive power of this measure beyond 12-weeks would be useful. For example, Bauer and Green (1994) found that past work experience can predict organisational commitment and performance as much as 9-months post-appointment.

Job Interest Measure

A second psychometric aspect of this study included the development of a valid measure of job interest. In line with Athanasou and Van Esbroeck (2007), the 3-item measure created for this study had a time component (i.e., as in the case of a long-term interest), was future-focused (i.e., as in the case of skills and knowledge yet to be acquired), and was individualised (i.e., personalised to the individual who identified with the vocational area of interest). Results showed that this measure had good internal consistency reliability for NZ Police and graduate newcomers, and was able to predict future role breadth self-efficacy among both groups. This measure also had good user acceptability and practicality.

To date, there is little unification among researchers as to what constitutes job interest (Athanasou & Van Esbroeck, 2007). Further item development would therefore be useful to more comprehensively explore, and therefore capture, the multi-dimensional nature of this construct. According to Krapp (2007) there is a dispositional tendency for some individuals to engage with a vocational area of interest, while for others, an interest can be situational only and dependent on an external incentive. Hidi and Renninger (2006) also suggest that an individualised interest can be defined as either emerging or well developed, and that recognition of this difference is important if we are to fully understand the developmental continuum on which job interests evolve.

Additional research would also be useful to determine the stability of the job interest measure across time and between graduate versus more seasoned newcomers. Whereas interests are thought to be in a state of flux during young adulthood, they become increasingly more stable past early adulthood. By 30 years of age job interests are assumed to 'set like plaster,' with little change expected for the remainder of one's life (Low & Rounds, 2007).

Proactive Behaviour Measure

Developing a valid measure of proactive behaviour was an important aim of the present study since this measure was intended to be the conduit between multiple predictor and criterion variables. Four pre-existing items from Ashford and Black (1996) were included in the measure; tapping into relationship building, information-seeking, and feedback-seeking (from one's manager and team members). Four additional items were also developed; measuring positive framing, listening, networking, and observation/modeling behaviour.

An analysis of scale reliability confirmed that at T1 and T2, item inter-correlations for all item pairings were generally low in magnitude with the NZ Police group. Factor analysis also revealed no clear pattern of item loadings, nor could any items be removed in order to improve internal reliability statistics. For the graduate measure, a non-normal distribution of scores was also found at T2 and T4.

Explaining the Poor Psychometric Results for the Proactive Behaviour Measure

There are four potential reasons for the poor psychometric results attached to the proactive behaviour measure. These issues are expected to have individually or jointly contributed to reducing the internal reliability of this measure and compromised its predictive validity.

Difficulty in item interpretation.

One possible explanation for the psychometrically weak proactive behaviour measure is that newcomers found these items excessively complex or too ambiguous to interpret. The problem with ambiguous items is that they often require individuals to develop their own idiosyncratic item meanings. This may either increase random responding or reliance on one's own response tendencies (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This was potentially the case with the positive framing and observation/modeling items which asked participants to indicate how frequently they had either "Replaced negative thoughts with more positive alternatives", or "Consciously paid attention to how others behaved…in order to learn what was right and wrong". According to Ashford and Black (1996), both behaviours require self-management of either a behavioural nature (e.g., observation/ modeling), or a cognitive

nature (e.g., positive framing). To accurately respond to each item therefore potentially required an elevated level of self-awareness and cognitive understanding that was not necessary when answering any other items.

Observation/modeling and positive framing are also passive behaviours, and as a result, may have been less memorable for the newcomer and more difficult to recall. In contrast, all other behavioural items were overt in nature and arguably more memorable for the newcomer.

Difficulty in rating scale interpretation.

In the Ashford and Black (1996) measure of proaction, individuals were asked to rate the extent to which they had engaged in each tactic on a 5-point rating scale using anchors that ranged from 1 (*to no extent)* to 5 *(to a great extent).* To establish a more fine-grained assessment of tactic use, the present study adopted a frequency-based rating scale based on objective units of time. For some individuals, the need to recall such detail in the context of a very intensive work schedule might have been confusing and led to miscalculations being made.

Cultural issues.

A major aim of the present study was to verify the extent to which both institutionalised and individualised work environments could support proactive behaviour. That said, situational factors can affect individual activity (Ashford & Black, 1996). For example, if an NZ Police instructor or graduate manager sanctioned certain proactive behaviours and not others, then this would be expected to guide the specific selection of behaviours made by newcomers under their guidance.

If they wished, NZ Police or graduate managers could directly (via instruction) or indirectly (via reward and recognition) influence a newcomer's decision to engage in proactive behaviour and with what frequency. With the NZ Police, a unique issue also existed in that the delivery of training was entirely conducted by in-house instructors. Although every effort was made to minimise instructor bias by preparing standardised training plans and pre-briefing material, I did not explicitly track each instructor's application of training course content.

The content-relatedness of proactive behaviours.

By clustering all proactive behaviours into one scale, each item was given equal importance in the measurement of proactive behaviour. Yet not all proactive tactics behave in predictable ways, nor are they equally important at equivalent points in time (Ashford & Black, 1996; Kim et al., 2005; Wanberg & Kammeyer-Mueller, 2000). Indeed, research has shown that newcomers will vary in their choice of behaviour and frequency of use depending on the outcomes they want to achieve (Chan & Schmitt, 2000), individual differences (Ashforth & Black, 1996; Wanberg & Kammeyer-Mueller, 2000), and in response to the environment (Griffin et al., 2000). With only one item per behavioural tactic, it was difficult to explore the relative importance of each tactic in supporting newcomer adjustment, or monitor any changes in individual tactic use over time.

Future Research

Overall, a combination of explanations seems the most plausible in understanding why the proactive behaviour scale was less psychometrically robust than anticipated. Based on these findings, additional work is needed to ensure that all items are unambiguous, and that newcomers are well informed about item content and how to use each rating scale. In line with Ashford and Black (1996), multiple items should be included to measure each tactic, and wherever possible, steps should be taken to minimise (or control) any environmental issues from biasing a newcomer's use of tactics.

NZ Police Specific Measures

Role breadth Self-Efficacy

In light of the inappropriateness of the Parker (1998) role breadth self-efficacy measure in a police context, an entirely new set of task-specific items were developed for the present study. Each item was designed to measure a specific element of role breadth self-efficacy as defined by Parker, but was unique to the NZ Police. In particular, items focused on the use of initiative, problem solving, resolving conflict, and the use of verbal skills. Analysis of this new 7-item measure showed it to have good internal consistency reliability and good test-re-test reliability over a 15-month

period. Results also showed it to be an important mediator in newcomer adjustment and to have a high level of user acceptance.

While the specific nature of the NZ Police role breadth self-efficacy measure limits its generalisability, some additional research would be useful to establish its appropriateness with other military or para-military samples. In addition, exploration of the relationship between role breadth self-efficacy and background variables such as gender, tenure, and age is warranted. Initial research by Parker (1998) found that women reported lower role breadth self-efficacy than men inside a male-dominated work environment. Whether this relationship would hold true for the NZ Police is of interest, particularly in light of the policy to actively recruit more female sworn staff (NZ Police Annual Report, 2006). Parker found no significant differences in the role breadth self-efficacy of longer serving or older employees however, suggesting that the relationships between gender, situation, age, and tenure is a complex domain and worthy of further exploration.

Additional item development would also be useful to capture the functional interdependence of role breadth self-efficacy. According to Parker (1998), employees need to coordinate their activities laterally across business units or divisions in order to solve customer and supplier issues. In the context of the NZ Police, this would include developing the measure to reflect one's activity with such groups as dog handling, the dive squad, and traffic team to name a few.

NZ Police Performance Measure

At 10-months into field work (and 15-months post-appointment), a self-rating of constable performance was sought. Preliminary analysis using this 19-item measure showed that it could be reduced to a logical set of three smaller sub-scales measuring the operational, tactical, and communication elements of a constable's day-to-day role. While each sub-scale had good internal consistency reliability, it was the 'tactical' performance factor that best captured the proactive, self-starting behaviours Parker (1998) identified as being critical to job success. The extensive involvement of job experts in the design of this measure also meant that user acceptability, practicality, and content validity were secured.

Given the unique content of police performance, the generalisability of this measure is limited. Nevertheless, some additional analysis would be useful to ascertain item appropriateness with other military and para-military groups. Using the rigor of structural modeling, it would also be useful to explore if task mastery could predict the two remaining components of police performance; operational performance and communication. There is also value in exploring the extent to which police newcomers differ in their tactical, operational, or communication performance based on their level of role breadth self-efficacy. This would be useful since prior studies have tended to measure performance using a one-dimensional construct (Ashford & Black, 1996; Morrison, 1993b; Thompson, 2005).

Self-reported measures of performance are problematic and prone to self-serving bias (Ashforth & Saks, 1996). Going forward, it would therefore be useful to explore the correlation between subjective self-ratings of police performance and more objective measures including absenteeism, academic scores, and newcomer turnover. Exploring the inter-rater reliability between recruit self-ratings of performance, as well as that provided by police supervisors and peers would further support the robustness of this measure.

Graduate Specific Measures

Graduate Performance Measure

In line with Campbell (1990) and Campbell et al., (1993), the graduate measure of performance captured seven important aspects of the performance domain. Data output showed this measure to have acceptable internal consistency reliability and to have content validity across 10 graduate organisations.

In the present study, a single measure of graduate performance was taken at 24-weeks into one's tenure. Some additional analysis would therefore be useful to confirm the stability of this measure over time. In line with Viswesvaran (2001) it would also be useful to acquire a customer rating of graduate performance. Not only would this verify the inter-rater reliability of this measure, it would also address the general deficiency in the literature around customer ratings of performance. The appropriateness of this measure for gauging performance with more seasoned newcomers, or individuals

moving from one project team to another inside the same organisation is also warranted. Answering these questions would help confirm the generalisability of this measure, as well as confirm its content validity and predictive power.

<div align="center">The Main Contributions of this Thesis</div>

In discussing the main contributions of this thesis, specific reference is made to each research gap it serves to address. The first contribution of this thesis is the presentation of a holistic theory and model of proactive socialisation. This includes multiple individual and team-level factors that were found to support newcomer adjustment. Secondly, this thesis highlights the importance of role breadth self-efficacy as a mediating influence in newcomer adjustment. The role of training in facilitating newcomer adjustment is the third important feature of this thesis, while forth and finally, the contribution of both an institutionalised and individualised environment in supporting newcomer adjustment is established.

A Holistic Theory and Model of Proactive Socialisation

Two decades ago, Fisher (1986) first criticised the socialisation domain as being fragmented and poorly understood. Although there has been a great deal of research in the past 20 years to address these criticisms, much of this analysis has explored a limited set of antecedents, mediating mechanisms, and consequences (Grant & Ashford, 2008).

In response to this situation, Model A (Figure 1) provides a positive first step towards explaining how the process of newcomer socialisation unfolds and the conditions under which adjustment should be achieved. In particular, Model A extends researchers' knowledge by showing that both individual differences and environmental factors uniquely contribute to newcomer adjustment – regardless of the socialising tactics employed by the organisation. This finding goes some way to reinforcing the importance of a two-pronged approach to newcomer adjustment. In addition, it reiterates the need to recruit individuals who meet important pre-entry, individual conditions, while also ensuring a supportive team and supervisory culture is in place. This finding holds true for the recruitment and selection of seasoned newcomers as well as Gen Y employees.

Model A also contributes to existing research by unraveling the linkages between various proximal (i.e., task mastery, group fit, and role clarity) and distal (i.e., performance and commitment) outcomes. In this way, it extends the work of others (Kammeyer-Mueller & Wanberg, 2003) while also reinforcing the pathway through which a more self-starting, competitive workforce can be developed.

It is hoped that the provision of a more fine-grained conceptualisation of newcomer adjustment will address some of the competing claims in the literature regarding the adjustment of newcomers socialised in a more institutionalised versus individualised workplace. In addition, Model A provides greater impetus to a more interactionist approach to socialisation (Wanous & Colella, 1989) in which both individual and situational variables are given prominence.

Confirming the Importance of Role breadth Self-Efficacy

This thesis makes a significant contribution to role breadth self-efficacy research by reiterating its role as an important mediator in newcomer adjustment. This finding substantiates the work of others (Parker et al., 2006); and reinforces the importance of selecting and developing staff who have the self-belief to perform. Role breadth self-efficacy was found to be partly driven by individual characteristics, as well as the overall quality of one's team and leader support. This thesis also supports a growing body of research that has found a link between role breadth self-efficacy and proactive behaviour (Axtell et al., 2000; Ohly & Fritz, 2007; Parker et al., 2006). It extends this work by showing that the relationship between both variables is moderated by training, and that training provides the 'support' for newcomers with self-belief to be proactive. Training was also most effective when key messages were repeated over multiple sessions, and integrated into the solving of real-world tasks.

Whereas the concept of self-efficacy has been the focus of a voluminous amount of socialisation research, the importance of role breadth self-efficacy has only recently come to prominence (Axtell et al., 2000; Axtell & Parker, 2003; Ohly & Fritz, 2007; Parker, 1998; Parker et al., 2006). This thesis therefore contributes to an important body of work that emphasises the importance of facilitating staff's self-belief as the foundation for building a proactive workforce.

Establishing the Role of Training in Newcomer Proaction

A major contribution of this thesis is its role in elevating the importance of training in facilitating newcomer proaction. Results found that a training intervention facilitated the most pronounced gains when it incorporated learning in a broad range of tactics, and which were also relevant in solving real-world outcomes. In doing so, this thesis casts doubt on previous research that has assumed proactivity to be constant over time (Ashford & Black, 1996; Bateman & Crant, 1993; Morrison, 1993a; Seibert et al., 1999). It also reiterates the importance of retaining a close match between the training and retrieval environments (Arthur et al., 1998).

While findings with respect to training delivery were reasonably modest, they were significant, and point to the importance of the context in which training was delivered. Regardless of one's employing organisation, training was disseminated into manageable 'chunks' and participants were given the opportunity to immediately practice these newly acquired skills. What differentiated the institutionalised environment as a preferred training platform was the repetition of key, training concepts over an 18-week period (as opposed to the 1-day face-to-face programme provided to graduates). Training was also exclusively delivered in a face-to-face forum, rather than via an electronic medium. This thesis points to the value of additional research to confirm the relative usefulness of electronic, distance learning versus more collaborative group learning.

Exploring a Broad Repertoire of Proactive Behaviours

Within the socialisation literature, proactive behaviour has been explored from a range of perspectives (Ashford & Black, 1996; Ashford & Taylor, 1990; Ashforth et al., 2007; Feldman & Brett, 1983; Miller & Jablin, 1991; Wanberg & Kammeyer-Mueller, 2000). In spite of the advances made by these studies, most researchers continue to explore proaction from a narrow perspective; focusing predominately on information-seeking behaviours at the expense of other more 'mindful' tactics (see Saks & Ashforth, 1997a for a review of relevant research).

A central tenet of this thesis was that a newcomer could be trained in seven specific proactive behaviours, and that one's pattern of proaction would vary as a consequence of his or her environment. This thesis also contributes to the socialisation

domain by showing that in an institutionalised environment at least, proactive people expect to be successful, and facilitate their own proaction by pursuing a more flexible role beyond immediate job obligations. Finally, the longitudinal element of this thesis has also provided a more comprehensive perspective on how the proactive socialisation processes unfolds over time.

Socialisation Tactics

Over 2 decades ago, Jones (1986) conducted his seminal work on the relationship between socialisation tactics and newcomer adjustment. This thesis extends Jones' work by showing that newcomers can enjoy an elevated level of performance and commitment regardless of the socialising tactics adopted by their employing organisation. It also consolidates a growing body of literature that has explored the pathways by which these more distal outcomes are achieved (Ashforth et al., 2007; Kammeyer-Mueller & Wanberg, 2003; Saks et al., 2007).

In particular, task mastery stood out as the critical characteristic in facilitating newcomer performance across both an institutionalised and individualised environment. This finding suggests that Hall's (1996) assessment of task mastery as a 'metaskill' that is essential for career success in the 21st century is well founded. This thesis also found that group fit was a significant predictor of task mastery, role clarity, performance, and organisational commitment. This finding supports the notion that cooperation and coordination within a work group should spill over into a greater desire to fit in with, and succeed in, the organisation as a whole (Kammeyer-Mueller & Wanberg, 2003).

In line with expectations, role clarity did facilitate a higher level of organisational commitment inside an institutionalised environment, thereby giving credence to the argument that newcomers who have a clear sense of their job responsibilities should experience less anxiety, and feel more positive towards their employing organisation (Ashforth & Saks, 1996). Contrary to expectations, role clarity did not facilitate a more committed graduate workforce. For graduates involved in this thesis at least, a sense of belonging and group fit predicted commitment to the organisation. By distinguishing between proximal and distal indicators of adjustment, this thesis has been able to highlight the proximal outcomes that an organisation might usefully develop given their relationship with more long-term outcomes.

This thesis also contributes to a growing body of research that has begun to explore how socialisation tactics and proactive behaviour might jointly affect newcomer adjustment (Ashforth et al., 2007; Gruman et al., 2006). In particular, results found some important differences do exist in the longitudinal pattern of proaction between newcomers socialised in an institutionalised versus individualised workplace. Rather than stifle one's proactive talents, an institutionalised workplace does emerge as a rich environment for developing a proactive orientation, and will engender a reliance on these behaviours in response to environmental change.

In conclusion, by considering proactive behaviour in the context of an organisation's socialising tactics, this thesis has been able to offer a more complete view of how these processes work in tandem and across time.

<div align="center">Methodological Strengths and Limitations</div>

In their review of the socialisation domain, Saks and Ashforth (1997a) highlighted a number of methodological limitations that needed to be addressed. This thesis tackles a number of these issues, namely to do with (a) longitudinal research, (b) experimental design, and (c) measurement tools.

Longitudinal Research

While it is well known that the socialisation process unfolds over time, socialisation research has tended to lag behind in its use of longitudinal designs (Saks & Ashforth, 1997a). Since there are differences in the pattern of information gathering over time (Ostroff & Kozlowski, 1992), research time frames beyond 1 year are recommended to ''allow outcomes to be more fully influenced by socialisation processes'' (Bauer & Green, 1994, p. 221). This thesis goes some way to address this issue by exploring newcomer socialisation over a 15-month period for the NZ Police sample.

In a related issue, Saks and Ashforth (1997a) also raise the importance of more appropriate time lines for longitudinal data collection and the measurement of variables early in the adjustment process. In a recent meta-analytic review, Bauer et al., (2007)

found that the most frequently used time intervals for data collection were at entry, 3-months, and 6-months post-appointment. This is in spite of consistent evidence to suggest that early measures of socialisation are important in determining later outcomes. This thesis supports the rapidity of newcomer adjustment by showing that important work outcomes can be predicted at 18-weeks post-appointment. It also reinforces Morrison's (1993a) belief that newcomer change persists beyond 6-months by showing adjustment outcomes 15-months into the job for newcomers socialised in a more institutionalised environment.

Experimental Research using a Diverse Sample

Saks and Ashforth (1997a) also identified the need for more experimental studies that compared the effectiveness of different socialisation interventions, or compared the experiences of different newcomers undergoing a similar socialisation programme. This thesis begins to address these issues by employing a multi-intervention design with two diverse, research groups.

The use of a more diverse sample also goes some way to address the criticism directed at past research for its reliance on selective samples, or homogeneous samples from one occupation (Fisher, 1986; Saks & Ashforth, 1997a; Wanberg & Kammeyer-Mueller, 2000). The importance of a diverse sample is not lost on Bauer et al., (2007) who suggests that the more experienced newcomer is likely to face a very different set of challenges compared to the newcomer transitioning from school to work. Experienced newcomers are also one of the most understudied groups who experience socialisation (Carr et al., 2006). With this in mind, this thesis also represents a step towards enhancing our understanding of the relationship between prior experience and socialisation outcomes for the veteran newcomer.

Finally, this thesis goes some way to address Saks and Ashforth's (1997a) criticism concerning the dearth of intervention-based research. By exploring the relative importance of training with a control, placebo, leader-member exchange, and proactive training group, this thesis helps verify the sorts of actions an individual, the group, and the organisation can take to support newcomer adjustment.

Measurement Issues

Saks and Ashforth (1997a) make two criticisms of socialisation research in relation to the measurement methods used; namely the over-reliance on self-reports of newcomer socialisation experiences, and the continued reliance on traditional socialisation outcomes. Each criticism is discussed in turn.

Self-report data is generally accepted in research that is concerned with newcomer learning and assimilation (Bauer & Green, 1994). Fogarty (2000) supports this view, and argues that since the process of socialisation pertains to personal change, it is appropriate to draw feedback directly from staff on how 'accepted' they feel. Self-report data has greater predictive power than other more objective methods (Ashforth & Saks, 1996), yet it is not without its potential problems. Most notably, these include the issue of common method bias (i.e., bias that is attributable to the measurement method rather than to the constructs under review). Method bias arises from having a common rater, a common measurement context, a common item context, or from the characteristics of the items themselves (Podsakoff et al., 2003). Whatever biases are operating, method bias can have a serious influence on empirical results and yield potentially misleading conclusions.

This thesis adopted several specific steps to control for method bias. Firstly, by separating all questionnaires by a 6-weekly interval meant that the passage of time and intervening events should have reduced any method variance effects (Ashforth & Saks, 1996). Secondly, by asking newcomers to provide a large number of ratings across a wide range of subject areas it was possible to minimise memory effects at each stage of questionnaire delivery (Ostroff & Kozlowski, 1992). Thirdly, by using multiple scale anchors newcomers had to engage in an elevated level of cognitive processing. In line with Podsakoff et al., (2003) this was expected to decrease the possibility of any covariation among scale measures as a result of consistency in scale properties. In a specific move to reduce social desirability bias, the role breadth self-efficacy measure for the NZ Police and graduate group assessed real work scenarios (Parker et al., 2006). Each measure that wasn't already proven to have good reliability was also written as objectively as possible to reduce social desirability responding (Jones, 1986). Taken together, these steps suggest that the use of self-report data in this thesis was unlikely to threaten study validity.

Steps were also taken to supplement self-report measures with data from an alternative source, namely newcomer instructors and managers. In particular, objective ratings of newcomer proaction and performance were sought since these constructs were verifiable and of criticality from an organisation's point of view.

Another weakness of research identified by Saks and Ashforth (1997a) has been the continued reliance on traditional socialisation outcomes, namely job satisfaction, organisational commitment, and turnover intentions. Bauer et al., (2007) make the same criticism, and observe that the continued focus on distal outcomes should not be at the expense of more proximal tasks, norms, and values. This thesis goes some way to address these concerns by showing how three important proximal outcomes mediate the relationship between multiple antecedents of adjustment and distal outcomes.

Finally, given the similarities between socialisation and training, Saks and Ashforth (1997a) question the lack of studies that combine the richness of both literatures. In particular, they suggest that research should begin to assess newcomers' reactions to socialisation programmes in addition to learning and behavioural outcomes. This thesis takes a step towards addressing these issues via the inclusion of a longitudinal training intervention that was implemented across two distinct newcomer groups. While practical constraints meant that the NZ Police intervention could not be replicated exactly with graduates, results did support the value of training, at least for police recruits.

This thesis contributes to the socialisation domain in several important areas. Most notably these include; 1) an intervention approach, 2) a longitudinal design with two diverse samples, 3) the inclusion of supervisory ratings of performance and proaction, and 4) the inclusion of proximal and distal outcome measures. Despite its numerous strengths, this thesis is not without its weaknesses. In line with Van Maanen (1977), socialisation is ongoing throughout an individual's career, and as such, further adjustment is likely to have occurred beyond the measurement periods adopted for this study. Although previous research suggests that most change occurs early on in one's organisational tenure (Ashforth & Saks, 1996), it would have been useful to confirm this by investigating the NZ Police and graduate group over an equivalent timeframe.

Secondly, although there was diversity, each research sample was almost exclusively made up of middle-class New Zealand Europeans. Future research is therefore warranted to ascertain the extent to which these results compare with other ethnic samples that might have a different pattern of socialisation. Finally, this thesis made no contribution to important adjustment outcomes such as organisational citizenship behaviour and absenteeism (Saks & Ashforth 1997a), nor the measurement of destructive and creative employee behaviours (Bauer et al., 2007). Each of these areas tend to be neglected in socialisation research, but are worthy of a more fine-grained assessment.

Practical Implications for Management

The primary focus of this section is to present a number of organisationally-driven, practical recommendations to support newcomer adjustment. These recommendations are presented in three sections to reflect the chronological order in which socialisation unfolds and the pervasive effect of socialisation at all career stages.

Pre-Entry

Pre-entry experiences may play a much stronger role in the organisational adjustment of some newcomers than others. Regardless of one's socialising environment, both the quality and quantity of prior work experience appear to have influenced perceptions of role breadth self-efficacy even before organisational experiences could take effect. Whereas prior work experience in one or two jobs did not predict future role breadth self-efficacy for either NZ Police or graduate newcomers, prior work experience did predict future self-efficacy in three jobs (for NZ Police) and three or more jobs (for graduate newcomers). For the NZ Police at least, prior work experience in more than three jobs was negatively correlated with perceptions of future competence.

These findings have important implications for the way in which an organisation should describe a job to potential employees. On the basis of work by Meglino, Ravlin, and DeNisi (1997) it would appear that if a candidate pool consists mainly of newcomers without any prior work experience, a realistic job summary is an appropriate tool. The accuracy and amount of information provided to job newcomers cannot be

underestimated since one's expectations of the job rests in part with the quality of pre-entry job information (Carr et al., 2006). Organisations may also benefit from preparing specific information sheets to address the concerns, queries, or considerations identified by previous newcomers and thereby help the next generation better understand what is expected of them (Wanous, 1992) and facilitate their coping (Louis, 1980).

In contrast, veteran newcomers with prior work experience may have already internalised a set of beliefs, values, and job expectations that are unique to their previous role (Beyer & Hannah, 2002). As a consequence, when the candidate pool includes experienced newcomers, employers should be more considered about what job information they provide (Meglino et al., 1997). In particular, organisations should carefully balance negative and positive job elements for the experienced newcomer, so as to avoid an overly negative job perception and reduced feelings of self-efficacy.

On the basis of NZ Police data at least, it would appear that beyond three jobs, prior work experience could become detrimental to newcomer adjustment. Adkins (1995) attributes this situation to an over-confidence in one's ability to do the job, thereby leading to reduced attention and a loss of self-efficacy. Alternatively, a newcomer with multiple prior jobs may highlight someone with a lack of commitment and general stickability. By questioning further, an organisation can ascertain the legitimacy of one's reasons for frequent job change, and confirm the accuracy of perceptions held in relation to the potential role. If required, the mechanisms can then be put in place to correct any newcomer misinformation and 'false confidence' (Adkins, 1995).

When hiring for positions that require activities that are more proactive, interpersonal, and integrative in nature, organisations may find it useful to administer some combination of psychometric assessments to test for these abilities. While this should assist in the identification of potential employees who have higher role breadth self-efficacy, it should also help identify individuals who need more assistance during the adjustment process. If feasible, the opportunity for newcomers to learn about the job via an internship, or 90-day probationary trial period may also help determine the likelihood of job-fit prior to offer. Post-selection, but prior to entry, organisations

should also aim to provide newcomers with the opportunity to meet existing staff, especially members of the individual's proposed workgroup.

Initial Entry

From an organisation's perspective, it is critical that a newcomer adjusts quickly into the role and understands what constitutes appropriate and inappropriate behaviour. Traditionally, the content focus of early socialisation research has been on the transference of organisational values, norms, and goals (Van Maanen & Schein, 1979; Taormina, 1997). Results from this thesis suggest that acquiring this information may be less important than supporting newcomer task mastery, group fit, and role clarity; at least within the first 18-weeks of tenure. A primary issue then, is to determine the most appropriate sorts of learning scenarios and strategies to enhance more proximal modes of adjustment.

Results from this thesis suggest that if an organisation wants to facilitate the proximal adjustment of newcomers then they must recruit and develop staff with an elevated level of role breadth self-efficacy. Research by Parker (1998) highlights a number of practical considerations for lifting newcomer role breadth self-efficacy. These include quality two-way communication, role autonomy, control, and participation in decision making. This thesis also suggests that role breadth self-efficacy can be enhanced by the overall quality of one's team and leader-member exchange. Involving experienced organisational insiders as role models, mentors, or trainers at the initial adjustment phase is expected to provide newcomers with the necessary support and foundation for more proactive strategies (Ostroff & Kozlowski, 1992). Management can also be strategic in the sorts of role models they involve (Filstad, 2004). Most notably, this should include role models who have the ideal characteristics, attitudes, and behaviour that they want a newcomer to emulate. Louis et al., (1983) concur, suggesting that peer or supervisory interaction is much more helpful than costly, formal orientation programmes.

Considerable emphasis has been placed on the role of one's first manager in terms of newcomer adjustment (Louis et al., 1983). Inside an institutionalised environment at least, a high-quality exchange with one's instructor at 7-weeks was found to affect both the group fit and role clarity of a police recruit. In light of this finding, there is

considerable benefit in training supervisory staff to be more supportive and respectful of subordinates (Harris et al., 2007). Each of these actions is anticipated to increase the exchange between manager and newcomer, thereby fostering a powerful team and organisational culture.

Of course, this does not imply that organisations can afford to ignore the role of the experienced coworker during newcomer adjustment. In line with Major et al., (1995), this thesis found that superior adjustment occurred with managers *and* team members were jointly involved. Thus, the socialisation experience of newcomers might be further enhanced if experienced team members were also given training to help in the adjustment of their newest work colleagues. At a more practical level, newcomer adjustment could also be enhanced by facilitating social gatherings, as well as orientation, and mentoring programmes. Not only would these serve to introduce newcomers to strong, potential role models, but also help them establish their informational and friendship network (Morrison, 2002). For the organisation's benefit, experienced team members might also be used immediately post-entry to communicate subtle values and expectations to the newcomer (Schein, 1988).

In line with prior research, this thesis found that new employees are not passive bystanders of workplace socialisation tactics, but can assume an active role in their own adjustment. On one hand, newcomers in an institutionalised environment may defer their use of proactive behaviours until they enter the field. On the other hand, newcomers from an individualised workplace engage proactively with their surrounds immediately on entry, but reduce this proaction over time. This situation has important implications for organisational practices. Most notably, it reinforces the value of providing all newcomers with the opportunity to develop a proactive, self-starting outlook, and points to the role of training in the development of proactive behaviours. If newcomer training is perceived as helpful, it should result in a higher level of organisational commitment and less intention to leave the organisation (Ardts et al., 2001).

For training to be effective, course content should cover multiple behaviours that stimulate a wide range of mastery experiences (Axtell & Parker, 2003). Training participants should also be given the opportunity to observe positive role models, to

repeatedly practice new behaviours in real-world situations, and engage in learning natural (as opposed to artificial tasks). Practically, this thesis also suggests that if an organisation wants to lift the uptake of training content, then it must invest in building employee role breadth self-efficacy.

Long-Term Adjustment

This thesis suggests that if an individualised organisation is concerned with loyalty and commitment, then it must facilitate newcomers' fit to group and sense of belonging. Alternatively, if an institutionalised organisation wants loyal, committed staff, then it must not only invest in group fit, but also arm newcomers with sufficient information about the responsibilities of one's job. In terms of facilitating long-term performance, the most effective newcomers – regardless of environment, are those who have the self-belief to master the tasks attached to one's role.

An organisation's socialisation processes can not only affect newcomer commitment, but also contribute to turnover, and interrupt the proliferation of organisational values and norms (Bauer et al., 1998). To improve socialisation outcomes, Cable and Parsons (2001) emphasise the importance of using newcomers to identify potential blocks and barriers to adjustment, and implementing training programmes for hiring managers. Morrison (1994) concurs, suggesting that it might be valuable for "managers to understand the subtle social and psychological factors that influence employees' perceptions" (p. 1563).

In a tight labour market, managers might also benefit from adopting the principles behind a well-designed institutionalised programme in order to retain employee engagement. In particular, managers might consider providing newcomers with more detailed information concerning the proposed sequence of one's career development and potential training opportunities. Additionally, this thesis suggests that when a newcomer feels adjusted to the group, then that should directly contribute to greater performance outcomes and increased commitment. To that end, Allen (2006) emphasises the importance of providing newcomers with positive feedback and structured group experiences to increase on-the-job embeddedness and reduce turnover. A more formalised socialisation programme might also be beneficial in terms of

reducing cost and increasing effectiveness (Bauer & Green, 1994). Manager's need to understand however, that newcomers in fast-growth firms may 'outgrow' such programmes more rapidly than newcomers in slow-growth firms (Rollag, 2007). Managers also need to guard against mass employees becoming so fully embedded into an organisation that it stifles organisational innovation (Ng & Feldman, 2007).

It is important for organisations to understand these differences if they are to assist newcomers to make sense of the socialisation process and guide their smooth transition through it. Practically, it also suggests that the challenge for managers is to design the right mix of incentives to retain high performing employees at different stages in their career, rather than be guided by the number of staff to retain as an end in itself (Ng & Feldman, 2007).

<p align="center">Future Research</p>

In the final section of this thesis, consideration is given to some potential directions for future research in order to expand our understanding of the socialisation domain. Research suggestions are presented in terms of three main areas concerning (a) what to measure, (b) how to measure it, and (c) who to measure.

What to Measure

A key research stream in this thesis was to explore what individuals can do to proactively socialise themselves. No consideration was given to how the proactive efforts of an individual might also impact on group norms and behaviour. For example, a proactive graduate might organise brainstorming sessions with other newcomers to help facilitate group adjustment and to share lessons learnt. Such proactivity might lead to some changes in organisational practices, as well as potentially enhance the induction of future newcomers. This is consistent with the concept of bi-directional influence (Anderson & Thomas, 1996) in which newcomers can be proactive by changing their role, work group, and the organisation. Future research might therefore consider the various ways in which a newcomer might exert influence beyond his or her role, and the situational conditions which most contribute to this happening.

The benefit of proactive effort was the dominant focus of this thesis, while the cost of proaction was largely neglected. It would be useful to redress this imbalance in future research, since the act of being proactive may not always be welcomed by supervisors or team members. Campbell (2000) labeled the tendency of organisations to encourage proactivity and then punish non-acceptable behaviour as the 'initiative paradox'. Researchers have also observed that the motivation for some individuals to engage in proactive behaviour may not be positively intentioned. In particular, Bolino, Turnley, and Niehoff (2004) suggest that some employees may volunteer for special assignments to avoid their normal duties, to cast doubt on the competence of their team members, or to make amends for previous transgressions. In the future, it would be useful to explore an individual's personal motivation for engaging in proactive effort, and the conditions that might constitute appropriate or inappropriate proactive efforts.

Despite a strong argument supporting the importance of newcomer proaction in facilitating positive adjustment outcomes, Model B lacked feasibility as a research proposition in this thesis. In part, it is expected that the poor psychometric properties of the proactive behaviour measure compromised the overall worth this model. Going forward, it would be appropriate to re-test Model B using an existing and valid measure of proaction such as that proposed by Ashford and Black (1996). Additional work would also be needed to ensure that all items are unambiguous, and that newcomers are well informed about item content. Where possible, steps should also be taken to minimise any environmental issues from biasing a newcomer's use of proactive tactics.

In this thesis, the geographical spread of graduate newcomers necessitated the distribution of training material via email. In the future, it would be useful to explore the role of technology in newcomer socialisation, since there is no doubt its role has increased (Salas & Cannon-Bowers, 2001). For example, Wesson and Gogus (2005) found that computer-conducted orientations were as effective as face-to-face orientations for information-based content areas, but were less effective for more socially rich content areas. Brown (2001) found that computer-based training contributed to variable amounts of practice time and task engagement for participants, and thereby led to differential levels of knowledge gain. Going forward, it would also be useful to determine more fully what level of interaction between trainees and instructors is necessary for optimal learning, as well as define the most appropriate

mechanism for engagement between participants themselves (e.g., chat rooms? email? face-to-face? or some combination of all three?). Research has already established that Gen Ys are a technically savvy and self-reliant group (Gursoy et al., 2008). Such conditions seem ripe for exploring the increased use of computers in the socialisation process, since computer-based training should afford learners a high degree of control over their own learning experience (Brown, 2001).

In this thesis, no attempt was made to categorise the proactive behaviours that were taught to NZ Police and graduate newcomers. Recently however, some attempts have been made to group proactive tactics into meaningful clusters on the basis that they are more passive, active, or interactive (Cooper-Thomas & Anderson, 2008) or are seeking, selling, or changing behaviours (Marrone & Taylor, 2004). Empirically testing these theoretical categorisations presents a viable area for future research. This analysis might also include testing the usefulness of clustering each tactic according to the extent to which its delivery is dependent on others. In particular, this would help qualify if tactics that are 'self-dependent' (i.e., do not require any reliance on, or interaction with, one's cohort) are more effective in stimulating proaction than tactics that are 'group-dependent' (i.e., require interaction with, and reliance on, other team members). This knowledge would enhance our understanding of what conditions maximise continuous learning (Tannenbaum, 1997). For example, Moreland and Myaskovsky (2000) found that training team members together in a task that required team work resulted in significant performance gains. It is equally plausible that if a behaviour did not require team interaction to be enacted, then the practice of that behaviour in an individualised context would be more appropriate.

In this thesis, the socialising tactics utilised by the NZ Police and graduate group were treated as exclusively institutionalised or individualised. In previous research, the dominant tone has also been the exclusive exploration of one or other of these modes, rather than combine both inside the same research sample. In today's quickly changing workforce, it is reasonable to expect an organisation to want both innovative and committed staff. Ardts et al., (2001) presents a strong theoretical argument for socialising newcomers with elements of both institutionalised and individualised tactics. Practically, this would suggest that while newcomers are given some responsibility for their own adjustment, guidance is still given by experienced organisational insiders.

Additionally, the learning of tasks associated with one's role might be split between some on-the-job individual effort and collective experience.

Organisations have a limited opportunity in which to satisfy the needs, desires, and skills of newcomers (Wright & Bonett, 2002). Employers need to therefore consider the impact of their socialising efforts on a newcomer's intentions to join an organisation and remain committed to it. To date, there is no known study in which a combined institutionalised and individualised programme of adjustment has been adopted.

In this thesis, proactive training was the only moderator used to affect the strength of the relationship between role breadth self-efficacy and future proaction. Alternative modes of training were, however, also delivered in this thesis (i.e., leader-member exchange training and applied proactive training for the placebo group). On the basis of a high-quality relationship with one's manager it is conceivable that newcomers will more readily develop the self-belief required to act in proactive ways. Similarly, if individuals are equipped with the practical skills to engage with their environment then they should, as a result, feel more confident to carry out a broader and more proactive role. Prior research supports the validity of both arguments (Axtell et al., 2000; Parker, 1998; Parker et al., 2006) and testing these potential linkages more fully in an applied setting.

Finally, and as already discussed in 'Hypotheses 7 to 10: Unexpected Findings', NZ Police instructors observed a higher level of proactive behaviour among placebo group members when compared to recipients of proactive training. While not intended, it appears that the placebo group was an applied proactive training intervention. In the future, it would be useful to replicate this study, and include an applied proactive intervention from the outset.

How to Measure

This thesis used quantitative research methods to test a theoretical model of newcomer socialisation. Participants were randomly assigned to each intervention group and were asked to complete multiple, standardised questionnaires over a 6-month to 15-month period. While quantitative approaches are sometimes referred to as the

'dominant paradigm' (Steckler, McLeroy, Goodman, Bird, & McCormick, 1992), this thesis may have been weakened by the inability to control the environment in which NZ Police and graduate newcomers completed some questionnaires. By adopting a quantitative approach, this thesis may have also lacked the richness of data that would have come from a more holistic and emergent approach to data gathering (Leedy, 1997).

In response to these issues, a number of researchers support the combining of quantitative methods with a more qualitative approach (Leedy, 1997; Steckler et al., 1992, Yoshikawa, Weisner, Kalil, & Way, 2008). As a useful starting point, Steckler et al., have identified four options for integrating qualitative and quantitative methods into the same research. These options include using (a) qualitative methods to develop quantitative questionnaires, (b) the use of qualitative methods to help explain quantitative findings and vice-versa, and finally, (c) the equal use of both methodologies to cross-validate study findings. While the use of qualitative and quantitative methods can be integrated throughout all stages of a study, Yoshikawa et al., recommend that design choices are made a priori and developed in an iterative, cumulative way.

During the scoping phase of future socialisation research, it would be useful to conduct a series of interviews with individuals who are prominent in the research domain. This exercise would help define project parameters and consolidate lessons learnt as well as potential risks. Focus groups with the target audience would also help solidify the language, attitudes, and beliefs of the research sample and help frame questionnaire design, content, and structure. It might also help establish a level of rapport with study participants that is crucial for collecting rich and personal accounts (Yoshikawa et al., 2008). During project design, each questionnaire used in this thesis was pre-tested with a sample of recruits from the NZ Police and verified by graduate organisations as being fit for use. A more robust, (albeit more costly alternative), would require delivering a series of focus groups to a random sample of members from the target audience. In this way, each sample could provide a verbal, spontaneous response to each question and articulate out loud their reaction to it.

Upon commencement of data gathering, interaction with study participants was largely restricted to the delivery of each questionnaire. Detachment from participants was an important part of research design so as to make the most objective, unbiased

observations as possible. In addition, carefully constructed research hypotheses remained fixed throughout the data gathering process, together with all concepts and variables of interest. In the future, researchers could complement this approach with more direct contact with study participants so as more fully capture the complexity of the phenomenon under study (Leedy, 1997; Yoshikawa et al., 2008). Qualitative methods might also better signal what changes are needed in one's research strategy or communication. Relevant methods could include periodic open-ended interviews, focus groups, or direct observation of members from the target audience to assess the extent of behavioural change.

In this thesis, a quantitative approach was used to explore the behavioural norm among NZ Police and graduate newcomers. As a consequence, it has been possible to describe the observed results in precise terms as well as make predictions as to the generalisability of research findings. That said, the inclusion of more qualitative techniques might have allowed the identification of successes at a more humanistic level. In particular, focus groups and interviews might have aided in the collection of people's individual stories and substantiated quantitative ratings.

It is clear that both quantitative and qualitative types of research are useful to assess the full impact of an intervention. Combining both types of information might also reduce the distortion of research findings, while serving to validate the contribution of each method (Kelle, 2001). Going forward, the inclusion of both approaches might also help us to better understand how both types of evidence contribute to the overall story being told and its generalisability to a wider population.

Who to Measure

To date, a lot of socialisation research has focused heavily on the adjustment of graduate newcomers to the workplace. While a useful group to study, graduate staff may offer few opportunities for genuine learning as a consequence of being more passive and compliant (Ashforth & Saks, 2000). Because socialisation is an on-going process, our knowledge of the domain could be greatly enhanced by looking beyond the first-time employee. In particular, research might consider how the socialisation process differs for individuals who are promoted, transferred, or reassigned in the organisation, as well as those who experience more subtle job change such as

membership to a project team. This would be especially useful in light of research which found that individuals who changed jobs and organisations experienced greater disruption to their socialisation experience when compared to individual who changed jobs but stayed with the organisation (Chao et al., 1994).

As society moves towards increasingly more sophisticated modes of communication, coupled with organisational downsizing and restructures, the relationship between organisation and employee has also changed. Increasingly, employees have a variety of working relationships with the organisation (Cooper-Thomas & Anderson, 2005). This includes part-time, shift-work, and contract positions, as well as the sharing of desk space, virtual offices, and working from home. Research is needed to maximise the socialisation experience of staff involved in temporary but critical roles so that organisations might engage these staff more efficiently and effectively.

Some preliminary work exploring differences in the socialisation experience of newcomers in non-western societies has already been done (Kim et al., 2005; Taormina & Bauer, 2000; Tierney et al., 2002). Collectively, this research suggests that there are some important similarities and differences in the socialisation experience of newcomers from non-US cultures, and implies the need for more cross-cultural research in an international context. Saks and Ashforth (1997a) concur, suggesting that the culture shock of working in a foreign country is likely to give rise to numerous difficulties, complexities, and challenges. Expatriate research is a related area in which more study would be useful since international transitions may be quite different from organisational-entry transitions (Black, 1992). In particular, it would be interesting to consider what conditions might expedite the socialisation process for expatriates; the extent to which this process can be enhanced by training, and the period over which socialisation from one culture to another might occur.

Finally, researchers acknowledge that socialisation starts early in the parental home (Feij, 1998), during which time, children assume the class and educational background of their parents (ter Bogt, Raaijmakers, & van Wel, 2005). This being the case, it would be valuable to explore what parental factors play a specific role in helping

or hindering the socialisation process to work, and the conditions under which schools might 'resocialise' a young person.

<div align="center">Conclusion</div>

This thesis extends past research in a number of important ways. Firstly, it enhances our understanding of the individual and group-level predictors of newcomer adjustment. More specifically, it shows that individual variables (i.e., prior work quantity and quality, job interest, and proactive personality), together with environmental variables (i.e., team support and leader-member exchange) work in tandem to predict task mastery, group fit, performance, and commitment. These relationships hold for newcomers socialised inside an institutionalised or individualised workplace. These findings reinforce the importance of a two-pronged approach to supporting newcomer adjustment. This includes recruiting individuals who meet certain pre-entry, individual conditions, while ensuring a supportive team and supervisory culture is in place.

Secondly, this thesis suggests that predictor variables have a positive relationship with proximal and distal outcomes by affecting perceptions of capability. It would seem that people who expect to be successful will direct their efforts towards that end, regardless of the socialising tactics adopted by the organisation. A third contribution of this thesis was to demonstrate that newcomers adopt a different pattern of proactive behaviour as a consequence of working inside either an institutionalised or individualised workplace. Despite the assumption that proactivity is constant over time (Ashford & Black, 1996; Bateman & Crant, 1993; Morrison, 1993a; Seibert et al., 1999), results suggests that training can facilitate a more proactive, self-starting outlook. To maximise training effectiveness, course content should be delivered over an extended period and be integrated into the delivery of real-world outcomes. Some preliminary work may also need to be done to build employees' perceptions of their own capability so as to make best use of any training investment.

A fourth contribution of this thesis has been to offer a deeper insight into the adjustment of seasoned newcomers versus graduate employees, by melding together traditional strands of research, with emerging Gen Y considerations. Preliminary

research suggests that Gen Ys do have different experiences and expectations of work than earlier generations. While this thesis has indeed found some important differences between both groups, there are also a number of similarities between graduate versus more seasoned newcomers that cannot be discounted. This thesis goes on to present a number of practical options for securing the performance and commitment of both groups at a time when there is a recognised 'war for talent' in the New Zealand marketplace *(*Macfie, 2007).

In conclusion, this thesis has contributed to the socialisation literature by examining the relative importance of multiple individual and group-level factors in supporting newcomer adjustment. Testing the interaction of these factors with multiple interventions and across two distinct socialising environments enabled the role of different predictor variables to be isolated. The ways in which these variables linked to more proximal and distal outcomes also enabled more definitive conclusions about newcomer adjustment to be drawn.

Appendices

Appendix A: Measures Used in This Thesis

Time 1

Number of Jobs (Wanberg & Kammeyer-Mueller, 2000)
- How many jobs have you had in the last 5 years?

Prior Work Experience (Burke, 2009)
- At least one of my previous jobs used skills which are similar to those required by a Police Officer
- At least one of my previous jobs gave me an insight into the work of a Police Officer
- At least one of my previous jobs prepared me well for life in the police force

Job Interest (Burke, 2009)
- I have had a long-term interest in the work carried out by police officers
- The job of a police officer has appeal to me
- I look forward to acquiring the skills and knowledge to become a police officer

Team Support (adapted from Jones, 1986)
- I receive guidance from more experienced colleagues as to how I should perform my job
- I have support from people who have previously performed my job
- Experienced organisational members see advising or training newcomers as one of their main responsibilities at the Police College

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Proactive Personality (adapted from Seibert et al., 1999)

Please indicate the extent to which you have engaged in each of the following activities…

- I am often on the lookout for new ways to improve my life
- In the past, I have frequently pushed for positive change
- It is exciting to see my ideas turn into reality
- If I see something I don't like, I fix it
- If I believe in something I will make it happen
- I am good at identifying opportunities
- I am often looking for better ways to do things
- I don't let obstacles prevent me from reaching my goals
- I can spot a good opportunity long before other people can

(Accidentally omitted item: "I love being a champion for my ideas, even against other's opposition").

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Proactive Behaviour (adapted from Ashford & Black, 1996)

Please indicate the extent to which you have engaged in each of the following activities…

- Asked your section instructor for feedback on an issue of importance to you
- Asked questions about things you did not understand
- Mixed socially with other recruits
- Asked another recruit for feedback on an issue of importance to you

Proactive Behaviour (Burke, 2009)

Please indicate the extent to which you have engaged in each of the following activities…

- Let people know you were listening to them by doing such things as holding eye contact, not fidgeting, and nodding?
- Consciously paid attention to how others behaved at college in order to learn what was right and wrong?
- Replaced any negative thoughts with more positive alternatives?
- Buddied up with other recruits in your section to help with your own learning?

A	B	C	D	E	F	G
Never	Once or twice only	Once a fortnight	Once a week	Two to three times a week	Once a day	Two or three times a day

NZ Police: Role breadth-Self-Efficacy (Burke, 2009)

Please indicate how confident you would feel carrying out each of the following activities…

- Giving evidence in court without prejudicing a case
- Informing someone of a family member's death with sensitivity
- Calming down an abusive member of the public with words
- Displaying an appropriate level of empathy when giving a member of the public some upsetting news
- Controlling crowd behaviour at a crime scene
- Quickly evaluating a situation and identifying if any offence has taken place
- Organising members of the public at a traffic accident

Graduates: Role breadth Self-Efficacy (adapted from Parker, 1998)

Please indicate how confident you would feel carrying out each of the following activities…

- Presenting information to a group of colleagues
- Quickly building relationships with people you don't know
- Designing new processes/procedures for work
- Contacting people outside the organisation (e.g. customers/stakeholders/suppliers) to discuss their problems
- Analysing a complex problem to find a solution
- Persuading someone more senior to me with my ideas
- Giving business advice and direction to people from other parts of the organisation

1	2	3	4	5
Not At All Confident	Marginally Confident	Fairly Confident	Confident	Very Confident

Time 2

Leader-Member-Exchange (adapted from Liden et al., 1993)
- My section instructor recognises my potential
- My section instructor understands my needs
- My section instructor would defend my decisions
- My section instructor helps me solve work related problems
- I can count on my section instructor to help me out when I need it
- I know where I stand with my section instructor

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Time 3

Task mastery (adapted from Morrison, 1993a)
- I am confident about my skills and ability to perform my police duties
- I rarely make mistakes when carrying out my work assignments
- I feel competent conducting my work assignments
- I perform my police duties in an efficient manner

Task mastery (Burke, 2009)
- I have mastered the tasks associated with police training so far

Group fit (adapted from Chao et al., 1994)
- I feel accepted by other recruits within my section
- I am pretty popular in my section

Group fit (adapted from Morrison, 1993a)
- I believe most of my peers in my section like me
- I feel comfortable around my group of peers

Role Clarity (adapted from Rizzo et al., 1970)
- I know how much authority I have
- I know what my responsibilities are
- I know how my performance will be evaluated while at college
- I know exactly what is expected of me
- I have clear objectives to guide my activity

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Time 5

Organisational Commitment (adapted from Mowday et al., 1979)

- I am willing to put in a great deal of effort beyond that normally expected in order to help the NZ Police be successful
- I promote the NZ Police to others as a great organisation to work for
- I would accept almost any type of job assignment in order to keep working for the NZ Police
- I find that my values are very similar to NZ Police values
- I am proud to tell others that I am a Police Officer
- NZ Police inspires the best in me in the way of job performance
- I am extremely glad that I chose to join the NZ Police over other organisations I could have joined
- I really care about the reputation of the NZ Police
- For me this is the best of all possible organisations to work for

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

NZ Police: On-the job self-ratings of performance (Burke, 2009)

How much development do you think you still need to…

- Provide impartial advice to witnesses, complainants, and victims
- Use open questions (i.e. who, what, where, how), to elicit information from subjects, witnesses, complainants, and victims
- Listen effectively (i.e. maintain eye contact, open body language, not talk over others)
- Record comprehensible, but discreet notes at the time of interview
- Pick up, and stop/start things quickly in response to calls for support, and assistance from others
- Drive a police vehicle safely, and in line with NZ Police best practice
- Select appropriate tactical options for use in a situation (i.e. accurately match the level of force with the perceived level of threat)
- Gather information in a methodical manner (i.e. when asked, I could name each step in the process for intelligence gathering)
- See the links between pieces of information, how they 'fit' together, and identify where potential gaps exist
- Use Police technology (e.g., radio, PC) effectively and according to NZ Police best practice
- Be decisive in the actions I take when responding to others and/or situations..
- Use my initiative and work things out for myself
- Remain calm in response to pressured situations and/or frustrations
- Mix with members of the public in a personable, friendly manner (i.e. not talk down to people, or be threatening)
- Carry out all activity in line with Police College training, and accepted standards of best practice
- Network with other members of the team for information, feedback, leads, and options
- Build positive work relationships with my colleagues
- Demonstrate the values of the NZ Police on an on-going basis
- Maintain full and complete file notes

1	2	3	4	5
A great deal of development	A moderate amount of development	Some development	Very little development	No development

Graduates: On-the-job manager ratings of performance (adapted from Campbell, 1990; Campbell et al., 1993)

How much development is required by your employee in terms of his/her…

- Overall job performance
- Ability to work quickly and produce a high volume of work
- Ability to produce work to a high standard and without error
- Ability to communicate clearly in a written or oral format
- Ability to work effectively with other staff (i.e. is easy to get along with)
- Level of effort in completing work tasks
- Ability to follow organisational rules, instructions, and procedures
- Current job knowledge against role requirements

1	2	3	4	5
A great deal of development	A moderate amount of development	Some development	Very little development	No development

Appendix B: An Example of Model Modification

In line with best practice, the specific areas of misfit in each latent variable were identified by referring to the standardised residuals and modification indices (MIs) output in AMOS (1997). The steps taken in handling the NZ Police role breadth self-efficacy variable have been detailed more specifically in this Appendix as an example of the process adopted for all other latent variables.

NZ Police Role breadth Self-Efficacy

In line with Byrne (2001) standardised residuals were the first piece of information sought to confirm misfit in the role breadth self-efficacy latent variable. A review of Table 41 shows that the covariance between indicators 2 and 1 and 4 and 2 were the only statistically significant discrepancies to exceed the ideal of 2.58 (Joreskog & Sorbom, 1988, as cited in Byrne, 2001), and were therefore both worthy of further exploration.

Table 41
AMOS Standardised Residual Covariances

	7	6	5	4	3	2	1
7	.000						
6	2.036	.000					
5	2.409	.790	.000				
4	-1.024	-.939	-1.141	.000			
3	-1.167	.128	1.024	.266	.000		
2	-.904	-1.640	-2.017	**2.575**	-.212	.000	
1	-1.437	-.060	-.521	-.121	-.714	**2.678**	.000

As shown in Table 42, the role breadth self-efficacy variable could be improved by allowing the correlation of three sets of error terms; e2/e4, e1/e2, and e5/e7. Since high MIs on error covariances may be attributed to item redundancy (Garson, 2008), the corresponding regression weights for item pairing 1 and 2, 2 and 4, and 5 and 7 were also considered. Item content confirmed that there was indeed overlap between items 2 and 4 and items 5 and 7, to the point that they well have been asking the same question (Byrne, 2001).

Table 42
AMOS Modification Indices and Parameter Change Statistics:

Covariances:

			M.I.	Par Change
e6	<-->	e7	8.56	.08
e5	<-->	e7	17.35	.12
e4	<-->	e5	4.66	-.05
e3	<-->	e7	4.00	-.05
e3	<-->	e5	4.53	.05
e2	<-->	e6	6.89	-.07
e2	<-->	e5	15.18	-.11
e2	<-->	e4	20.19	.12
e1	<-->	e7	4.51	-.08
e1	<-->	e2	19.40	.17

Regression Weights:

			M.I.	Par Change
Q2b7	<---	Q2b6	6.13	.15
Q2b7	<---	Q2b5	8.89	.16
Q2b6	<---	Q2b7	6.14	.09
Q2b6	<---	Q2b2	4.08	-.08
Q2b5	<---	Q2b7	12.55	.15
Q2b5	<---	Q2b2	9.13	-.12
Q2b4	<---	Q2b2	12.04	.13
Q2b2	<---	Q2b6	4.94	-.14
Q2b2	<---	Q2b5	7.86	-.15
Q2b2	<---	Q2b4	12.49	.21
Q2b2	<---	Q2b1	13.28	.16
Q2b1	<---	Q2b2	11.52	.18

Little, Linderberger, and Nesselroade (1999) identify four criteria to support the selection of a reduced set of indicator items to represent a construct; 1) the correlation between indicator items, 2) the number of items, 3) the communality between indicators, and 4) indicator uniqueness. This criterion was used in consort with MI and parameter change statistics before selecting which role breadth self-efficacy items to remove. The final model excluded item 2 and item 7 and resulted in a substantial improvement in model-fit indices; χ^2/df =1.200, GFI = .993, AGFI = .979, sRMR = .023, RMSEA = .024, Lo90 = .000, Hi90 = .082. The cronbach's alpha for the reduced item set was satisfactory at .68, while parameter estimates were all of a satisfactory size (βs = .460 to .677).

Asking Questions (Tactic 1)

We ask questions every day. Most of our daily conversations involve either asking or answering questions. The art of questioning lies in knowing the right questions to ask, at the right time and in the right way. Asking effective questions is part of being an effective communicator and getting information you need effectively and with speed.

In this session, you will be introduced to three main types of questions which you are encouraged to use during your time at the Police College:

OPEN	CLOSED	PROBING

Open-ended Questions

Open-ended questions almost always start with <u>who, what, where, when, how, or why</u>. They are particularly useful for gaining as much accurate information as possible.
Example: *"Could you tell me more about?"…."Could you help me understand…?"*

Advantages of open-ended questions:
- invite opinions, thoughts, and feelings;
- get people talking
- encourage full answers
- help to get accurate information

Disadvantages of open-ended questions:
- can be time-consuming
- does not give the speaker any specific focus

Closed Questions

Closed questions are those questions which can be answered quickly by either a 'yes' or 'no' response. By definition, these questions are very specific, and can be answered in a few words.

Example: *"When do I need my assignment completed by?".... "When is the date for our next exam?"*

Advantages of closed questions
- quick to answer
- elicit precise and specific information
- they will give you facts

Disadvantages of closed questions
- can draw misleading conclusions because of a limited range of options
- can be seen as leading and therefore threatening to the speaker
- discourages openness in responding

Probing Questions

Sometimes, despite good open-ended questions, people respond with short answers and we need to probe with more specific questions to get more information. Probing questions help to get more meaning, to clarify, and to draw a person out.

Example: *"Can you give me a specific example of what you mean?"... "What do you mean by that?"*

Advantages of probing questions
- they are perceived as less threatening
- allow an unrestrained or free response
- may be more useful if the speaker is struggling to express their ideas

Disadvantages of probing questions
- can be time-consuming
- may result in unnecessary information
- require more effort on the part of the user

Key Points for Making the Most of Asking Questions

✓ Use open-ended questions to commence a conversation, and get people to open up and talk.

✓ Use closed questions when you need to focus the conversation or reach a conclusion.

✓ Use a mix of open, closed and probing questions to keep the discussion on track.

✓ Constantly evaluate whether you are getting the information you need and, if not, adjust your line of questioning accordingly.

✓ When you get answers like "maybe", "leave it with me" or any statement that is unclear, question it by asking what the speaker means. You need to be sure you fully understand where they are at.

✓ Avoid formulating your next question while someone is still responding to your last question, especially if it is going to distract you from listening.

When you can incorporate a range of questions into your information-gathering, you will be pleased with the amount and quality of information that you generate. Remember:

- **The more you ask questions, the more successful you will be.** When you are faced with a new learning experience, or situation that you are unfamiliar about, you need to spend most of your time asking questions and listening to the responses. Based on the responses, more follow-up questions may be necessary. These follow-up questions should help you gain additional clarity and information.

- **Ask good questions to receive good answers.** People who ask poor questions typically receive poor answers in return. You must ask good questions and good follow-up questions to make sure that you receive a good, clear explanation.

- **Think about what you want to know in advance.**

Asking for Peer Feedback (Tactic 2)

Our ability to ask and receive feedback plays an important role in lifting our performance, and maintaining positive relationships with others. Most of us, however, experience difficulty with asking for feedback. There are a number of reasons why people sometimes struggle to ask for feedback about their performance:

The feedback may be negative.
Many people avoid asking others for feedback because they have a sneaking suspicion that the news will not be good. If you want to improve your performance however, constructive criticism can help.

I don't know who to ask.
The choice of who you ask for feedback may vary depending on when you need the feedback and what kind of feedback you need.

I don't know how to ask.
It can be awkward to ask for feedback – particularly from a peer, even if you know who you want to ask. Remember, other recruits are going through the same learning as you, and can be a useful support and resource for information. The more specific you are in asking for the feedback you want, the better people can then help you.

Tips for Requesting Feedback

Be Prepared
Prepare yourself before requesting feedback from peers in your wing section by considering the areas you want to receive feedback on, who you will ask, and what you want to get out of the feedback.

Be Sincere
Ask for feedback directly, and make it clear you expect an honest answer. People know if you really do not want to hear their feedback. Be sincere in your request, and you will get valuable information.

Listen
Be prepared to listen openly to the feedback you are going to receive. You do not necessarily have to change anything about your behaviour, but if you request feedback, you must be prepared to listen to it.

Be Specific in your Request

Place clear boundaries around the feedback you are requesting, by specifying the areas you would like feedback. Try to avoid asking a general feedback question such as "What do you think of this?" and instead ask, "How could I handle xyz to make my assignment better?", and you will get more useful feedback.

Be Appreciative

Thank the person in advance who is giving you feedback. Let them know you are generally appreciative of their input, and demonstrate your commitment to act on the feedback you have been given.

Summarise your Understanding

Giving a summary of what you heard in your own words helps the conversation go more smoothly – you let the person know that you have been listening, and will ensure that you understand correctly what he/she meant to say. .

Openness to Feedback Quiz

Check out how open you are to feedback by answering the questions below. You can choose between three possible answers to each question; **Agree**, **Unsure** or **Disagree**.

Agree	Unsure	Disagree	
Agree	Unsure	Disagree	I take negative feedback personally
Agree	Unsure	Disagree	When people point out my mistakes, I feel like they are putting me down
Agree	Unsure	Disagree	I would be offended if someone with less experience criticized my work or ideas
Agree	Unsure	Disagree	If someone gives me feedback I don't want to hear, I switch off from what they are saying
Agree	Unsure	Disagree	If someone finds fault with something I have done, I find it hard to keep my cool
Agree	Unsure	Disagree	When I make a mistake, I will sometimes try to place the blame on someone else
Agree	Unsure	Disagree	I dislike being told how I should do things
Agree	Unsure	Disagree	Having made up my mind on something, it takes a lot for me to change my view
Agree	Unsure	Disagree	I have not asked a peer for feedback on my performance within the last 5 days

If you have answered 'agree' to any of these statements, you may need to develop your openness to feedback

Asking for Feedback Exercise

INSTRUCTIONS

Think about something that you would appreciate getting feedback on from another recruit in your wing section, and write this in the space below. (i.e. I would appreciate getting feedback on…..")

_____

_____

WHAT?

In order to give you feedback, people need to understand WHAT it is you specifically want to know. In the space below, try to list as many questions as you can that you could ask another recruit, in order to uncover more information about the issue you have listed above.

_____

_____

WHY?

On receiving feedback to your questions above, it would be useful to ask some follow-up 'WHY' questions. This will help you better understand why you have been given the feedback you have, or why it is important for you to act upon. Write your 'why' questions below:

_____

_____

HOW?

Feedback has little value unless we know 'HOW' to put it into practice. Imagine you have asked your feedback questions above, and in the space below, list the follow-up questions you need to ask in order to better understand how you are to put this feedback into practice, and in what situations.

_____

_____

WHAT – WHY – HOW Feedback Practice

1. Split into pairs.

2. Decide who will first play the role of the person asking for feedback and who will give feedback.

3. Each take turns asking your own feedback question to your partner, receiving feedback on this, and practicing your follow up 'WHY' and 'HOW' questions. For the person giving feedback, think seriously about what feedback you can give which would be meaningful for your partner, and which allows them to practice their questioning skills.

4. Swap roles, so that each person has the opportunity to practice asking for feedback.

5. At the end of each feedback, share your thoughts on what feedback questions worked well, what feedback questions did not work so well and how you would change/modify your questions in order to get better quality feedback.

How I will put this session into practice……

In the following week, try to find at least ONE situation in which you can ask someone in your wing section for some feedback that would be meaningful to you. Your feedback question could be about:

- Your handling of a recent situation
- How to approach an assignment
- How to handle a situation you are about to face
- Getting some direction or support

Asking for Instructor Feedback (Tactic 2a)

Our ability to ask and receive feedback plays an important role in lifting our performance, and maintaining positive relationships with others. Most of us, however, experience difficulty with asking for feedback. There are a number of reasons why people sometimes struggle to ask for feedback about their performance:

The feedback may be negative.
Many people avoid asking others for feedback because they have a sneaking suspicion that the news will not be good. If you want to improve your performance, however, constructive criticism can help.

I don't know who to ask.
The choice of who you ask for feedback may vary depending on when you need the feedback and what kind of feedback you need.

I don't know how to ask.
It can be awkward to ask for feedback – particularly from a member of staff, even if you know who you want to ask. Remember, this group is here to help you – and want to help in whatever way they can. The more specific you are in asking for the feedback you want, the better people can then help you.

Tips for Requesting Feedback

Be Prepared
Prepare yourself before requesting feedback from your section instructor or member of staff by considering the areas you want to receive feedback, who you will ask and what you want to get out of the feedback.

Be Sincere
Ask for feedback directly, and make it clear you expect an honest answer. People know if you really do not want to hear their feedback. Be sincere in your request, and you will get valuable information.

Listen
In addition, be prepared to listen openly to the feedback you are going to receive. You do not necessarily have to change anything about your behaviour, but if you request feedback, you must be prepared to listen to it.

Be Specific in your Request

Place clear boundaries around the feedback you are requesting, by specifying in which area you would like feedback. Try to avoid asking a general feedback question such as "What do you think of this?" and instead ask, "How could I handle…….to make my assignment better?", and you will get more useful feedback.

Be Appreciative

Thank the person in advance who is giving you feedback. Let them know you are appreciative of their input. A lot of people find it difficult to give feedback, however, you can address this situation by asking for feedback regularly, and demonstrating your commitment to act on the feedback you have been given.

Summarise your Understanding

Giving a summary of what you heard in your own words helps the conversation go more smoothly – you let the person know that you have been listening, and will ensure that you understand correctly what he/she meant to say. Ask questions in the event you are not clear about the feedback you have been given, or the feedback you receive is vague.

Openness to Feedback Quiz

Check out how open you are to feedback by answering the questions below. You can choose between three possible answers to each question; **Agree**, **Unsure** or **Disagree**. Circle the answer in each case that most applies to you.

Agree	Unsure	Disagree	I take negative feedback personally
Agree	Unsure	Disagree	When people point out my mistakes, I feel like they are putting me down
Agree	Unsure	Disagree	I would be offended if someone with less experience criticized my work or ideas
Agree	Unsure	Disagree	If someone gives me feedback I don't want to hear, I switch off from what they are saying
Agree	Unsure	Disagree	If someone finds fault with something I have done, I find it hard to keep my cool
Agree	Unsure	Disagree	When I make a mistake, I will sometimes try to place the blame on someone else
Agree	Unsure	Disagree	I dislike being told how I should do things
Agree	Unsure	Disagree	Having made up my mind on something, it takes a lot for me to change my view
Agree	Unsure	Disagree	I have not asked my Section Instructor for feedback on my performance within the last 10 days
Agree	Unsure	Disagree	I have not asked for feedback on my performance from other members of College staff within the last 10 days

If you have answered 'agree' to any of these statements, you may need to develop your openness to feedback

Asking for Feedback Exercise

INSTRUCTIONS

Think about something that you would appreciate getting feedback on from your Section Instructor (or other member of the College staff), and write this in the space below. (i.e. I would appreciate getting feedback on…..")

_____

_____

WHAT?

In order to help College staff give you feedback, they need to understand WHAT it is you specifically want to know. In the space below, try to list as many questions as you can that you could ask this person, in order to uncover more information about the issue you have listed above.

_____

_____

WHY?

On receiving feedback to your questions above, it would be useful to ask some follow-up 'WHY' questions. This will help you better understand why you have been given the feedback you have, or why it is important for you to act upon.

_____

_____

HOW?

Feedback has little value unless we know 'HOW' to put it into practice. Imagine you have asked your feedback questions above, and in the space below, list the follow-up questions you need to ask in order to better understand how you are to put this feedback into practice, and in what situations.

_____

_____

WHAT – WHY – HOW Feedback Practice

1. Split into pairs.

2. Decide who will first play the role of the person asking for feedback and who will give feedback.

3. Each take turns asking your own feedback question to your partner, receiving feedback on this, and practicing your follow up 'WHY' and 'HOW' questions. For the person giving feedback, think seriously about what feedback you can give which would be meaningful for your partner, and which allows them to practice their questioning skills.

4. Swap roles, so that each person has the opportunity to practice asking for feedback.

5. At the end of each feedback, share your thoughts on what feedback questions worked well, what feedback questions did not work so well and how you would change/modify your questions in order to get better quality feedback.

How I will put this session into practice……

In the following week, try to find at least ONE situation in which you can ask your section instructor, or member of the College staff for some feedback that would be meaningful to you. Your feedback question could be about:

- Your handling of a recent situation
- Performance on an assignment
- How to handle a situation you are about to face
- Getting some direction or support

Positive Framing (Tactic 3)

Do you ever talk to yourself? Lots of people do. Self-talk is a label that refers to all the things that you say about yourself. Self-talk can be encouraging *"I know I can do better next time"*, or negative *"I know I was going to fail"*.

A major problem with negative self-talk is that our negative thoughts tend to flit in and out of our heads and do their damage having hardly been noticed. Since we do not challenge them, they can be completely incorrect and wrong. Yet, this does not stop us thinking about them.

People often engage in negative self-talk when they fear the future, doubt their abilities, or expect failure. Negative self-talk damages confidence, harms performance, and holds us back from being successful. If you label too many situations with a negative tone, life can be gloomy and cause you stress. You can take steps to turn negative thoughts around. It starts with a technique known as **positive framing**.

Examples of Positive Framing

There is likely to be a number of different feelings you have had since arriving at the Police College and being put into a new situation.

- Feelings of not coping
- Worries that your performance will not be good enough
- Anxieties that things outside your control will undermine your efforts
- Worries about other people's reactions to your performance

You could challenge these negative thoughts in the ways shown:

Feelings of not coping	"I am becoming well trained to become a police officer. I am getting the experience I need to cope with anything I might face"
Worries about performance	"I have the time, resources and help I need to become a superb police officer and do an excellent job."
Anxieties about issues outside your control	"I have thought through everything that could possibly happen and have done my best to plan for any unlikely events."
Worry about other people's reactions	"I will perform as well as I can and will handle any criticism in a professional way."

Positive Framing Exercise 1

Here are some examples of negative self-talk. Have a go at framing each of these statements more positively:

Negative self-talk	Positive framing
I'm not smart enough to do this.	
There's never enough time to get things done.	
It's a waste of time.	
I'm not going to get any better at this.	
There's no way it will work.	
It's not my job.	
It's too risky.	
Let somebody else deal with it.	
It's good enough.	
I've already tried it.	

Positive Framing Exercise 2

Think about a problem issue you have recently dealt with or are dealing with, (this could be anything to do with money, relationships, work, family/friends etc). Write this down in the space provided and try to be as specific as you can. No one else will need to see this.

_____

_____

Read over the problem. Take note of how the problem <u>makes you feel</u>. Does it make you angry, disappointed or anxious? Write down as may words as you can to describe how the issue makes you feel.

_____

_____

Write down your thoughts about the problem. The feelings you have about an issue come from the thoughts you have about it. Write down every negative thought you can about the problem (e.g. I am feeling anxious about my work, because ……….).

_____

_____

Change negative thoughts into the positive. In the space provided, write each negative thought and alongside it, write a positive alternative.

Negative thought	*Positive Reframed Thought*

Get motivated to change. When you challenge negative thoughts rationally, you should be able to quickly see whether the thoughts are wrong or whether they have some substance to them. Where there is some substance, take appropriate action. In these cases, negative thinking has been an early warning sign showing where you need to direct your attention.

On-going exercise:
Over the next 2-weeks, keep check on all the negative thoughts that come into your head. Look for any patterns in your negative thinking.

Rationally challenge your negative thinking. Ask yourself whether the thought is reasonable: Think about what positive thoughts you can use to replace negative thinking. If you do this several times a day, it will only be a short time before your negative thoughts are replaced by positive ones.

Relationship Building (Tactic 4)

People are social creatures. Whether you think of yourself as outgoing or shy, a team-player or loner, your ability to build relationships with others – while at College, and with members of the community, is a central part of being a Police Officer.

Friends are great in themselves, and they form a vital part of your personal support network while you are at College. Taking the time to make new friends while at College is part of taking care of yourself, and it gives you the opportunity to be a support to others when they are in need, (and that can feel pretty good too!)

> ### Remember!
> That every interaction you have is an opportunity to build bridges and strong bonds while you are at College. Every person you come into contact with belongs to a social network that can help you get the most out of your time at College, support you, and help you achieve what you are capable of.

Making new Friends – First Steps

Detailed below are some options that might help you build strong, new friendships while at the Police College:

- Understanding yourself a little can help. For example, if you are naturally a shy person you may find it easier to get to know people slowly one-to-one and may prefer to have a few quiet, serious friends, rather than a lot of loud, noisy ones. Knowing yourself will allow you to present yourself more naturally, rather than come across as needy or desperate.

- Let people get to know you, so they can get a sense of who you are. Be positive and enthusiastic in your dealings with others. Ask open-ended questions such as "what did you think of that lecture?" ... rather than questions requiring only a 'yes' or 'no' answer.

- Resist the urge to isolate yourself. Try making a daily effort to sit beside someone different in lectures, and get involved in class discussions. Seek out opportunities to mix with other new recruits, over lunch breaks, after lectures and in the evening.

- Sport and cultural pursuits are also an excellent way of meeting like-minded people very quickly, and provide a natural ice-breaker to overcome any initial awkwardness.

- While you are at College, it is important you try to find your balance between solitude and socialising. You have a hectic timetable to get through and course requirements to complete. Knowing when to put the breaks on socializing and focus on your study will be a key to your success.

Building Comfort With Other Cultures

Try and make friends with a wide range of people, both male and female and from different backgrounds to you while at College. In order to communicate effectively with individuals or groups in the community whose culture is different to your own, you MUST have an understanding of, and sensitivity to, that culture.

What are some things to keep in mind when dealing with people from different cultural groups while at College?

_____

_____

_____

How can I add Value to my Friendships?

What are some of the benefits of having a strong network of friends while at College?

_____

_____

_____

While at College, what are the sorts of things you can do to personally be a support to other recruits?

_____

_____

_____

Dealing With Differences

While at College, you should expect to have differences with others in your wing section from time to time. Some of these will be irritating and may lead to misunderstandings. Negotiating your way through conflict is only going to work if you start with the assumption that there is no right or wrong point of view. There is simply a difference to be worked through.

When faced with a disagreement with others in your wing section, what are some positive actions you could take to resolve any differences early on?

Group Exercise: May I Introduce……

1. Get into pairs with someone else in the group you have had little to do with since your time at College.

2. Take turns to interview each other for 5 minutes and take notes. Use the interview to find out about this person's:

   - Favourite pastime/interest
   - A proud moment in their life
   - One interesting fact about this person that no one else would know
   - Anything else which is of interest to this person

3. Be prepared to introduce the person you interviewed to the rest of the team.

Networking (Tactic 5)

Much of your Police College study is organised on an individual basis. This is mainly because your section instructor and tutors need to be sure that the work you get graded on is your own work. However, 'people skills' and 'team work' are very important abilities to develop while you are at College. Whether you have the opportunity for team and group work in your programme or not, it is worth creating opportunities to develop these important interpersonal skills.

It is a well known fact that people who work in co-operative study groups often do better than people who work alone, or competitively. Working in a group can provide opportunities which, as an individual learner, are not so readily available. Some of the benefits of group work include:

- Another member of the group may have knowledge or experience which may help you
- A sense of responsibility to others can provide good motivation and encouragement - for example, people are more likely to do the preparation work if they know that other group members are depending on them
- More complex problems can be solved by breaking them down into separate tasks for group members - for example, a reading list could be shared out and group members make their notes available to others
- Discussing a subject with others can often help your own understanding

A number of skills are also developed working as part of a team, such as:

Interpersonal skills, e.g. assertiveness, debate
Oral communication skills
Self-appraisal, i.e. thinking about your own contribution to the group
Time management and decision-making

These personal and transferable skills are important not only while you are at College, but when out in the field. In some case, they could be more important than subject knowledge.

Organising Your own Study Group

While you are at College, it makes sense to develop your own study and team networks. The strength of group work is that problems can be tackled from different angles using the diverse skills of its members. Use study groups to:

Offer support to each other during assignments

Debate themes and issues that arise in relation to lecture topics

Discuss themes and identify gaps in lecture and class notes

Share readings and note taking from course texts

Before choosing to work with others, consider the following points:

Experience: Consider the levels of experience inside your peer group, and the combination of people who could work effectively together.

Diverse backgrounds: Some of the most effective groups include people from different backgrounds, such as mature recruits, people from different ethnic backgrounds, and gender. People with backgrounds which differ to your own will undoubtedly approach a topic from a different perspective, and hold ideas which you may have never considered.

Expertise: Some of your recruit peers may have areas of expertise that make them especially suited to working in a study group. For example, someone may be good at internet research, and another may be good at proof-reading.

Desire to learn: Select study group members who have a desire to learn, who understand the importance of working hard, and who are prepared to put in the hours and effort required.

Use an action plan: The whole reason to form a study group in the first place is to 'perform'. Before commencing any work in your study group, agree with team members such things as a) how the parts of a project can be best split up, b) what is the agreed standard of output? and c) how will progress be monitored?:

Team Exercise

Your section instructor will now lead you in a group exercise to determine your 'team role'. On the basis of this exercise, you will be in a position to form your own study group.

My Study Group:

In the space below, write the names of the people in your study group and the specific role they will each perform.

Team Member	Role they will carry out in our study group…..

Finally, give your study group a team name that captures who you are, your dreams, hopes or aspirations for the future. Be prepared to share this with all other study groups.

Our Team Name is: _____

Observation and Modeling (Tactic 6)

Most people are concerned, to some degree, about how they are seen by others. Whether you want to make a good impression to your section instructor, or want to avoid embarrassing yourself in front of your peers, most people want to create a favourable impression of themselves.

While you can learn what is acceptable and appropriate behaviour by trial and error, you can also learn by observing others. Sometimes learning by observing others can be a powerful force in lifting your own performance. If other people are succeeding at something that you would like to do, why struggle to discover the secret of success all by yourself? Why not learn from watching others' success – you may even learn a lot from their mistakes!

Using others to guide your own behaviour is called using a **role model**. Learning from role models is a combination of **watching someone's behaviour, thinking about what they did, and trying the behaviour for yourself**.

> **Having a role model is a way of developing the skills you need while at College and when out in the field.**

What Makes a Good Role Model?

- A role model is a person you watch closely to see how he or she deals with different people, situations and problems. To find a role model while at College, think about the people you have come into contact with in the last couple of weeks whose behaviour you would like to emulate. Your role model could be another recruit, or a member of the teaching staff.

- The important thing is to consider not just what they've achieved, but <u>how</u> they achieve things. In other words it's not enough to say, 'I would like to be like ….' The trick is to try and analyse what it is about this person's attitudes or behaviour that you really value.

So how do you use a Role Model?

The idea is to learn from watching what your role model does, and then copy this behaviour. You can lift your own performance by unraveling the individual actions of your role model and identifying the ones that relate to you.

There is a small warning, though. What has worked for one person is not always a strict formula for someone else's success. You have to apply what your role model has done to your particular situation and to your individual needs.

Watching Other Recruits

There is no reason why you cannot use other recruits to guide your understanding of what is 'right' and 'wrong' while at College, and to help guide your own learning of new tasks. In particular, you might find it useful to watch:

- what other recruits get rewarded for, and not get rewarded for
- who in your class instructors use to help demonstrate what to do, and not what to do in different situations
- the response from instructors to the questions and answers recruits give
- the behaviour of recruits who are recognized as doing well (and not so well) in different courses

When you copy the behaviours that you have seen another recruit get rewarded for, you are likely to be rewarded for that behaviour as well. When you succeed at that behaviour, you will, in turn, become more confident, and raise the bar for your own performance.

> **You can choose how to behave, so watch what other recruits and teaching staff do, what behaviour is rewarded, and what is not, and improve where you can.**

How Good are you at Modeling Behaviour?

Check out your ability to model other people's behaviour by answering the questions below. You can choose between two possible answers to each question; **True or False**. Circle the answer for each question that <u>most</u> applies to you. No one else need see your answers.

I find it easy to imitate the behaviour of other people	True	False
When I am uncertain how to act in a social situation, I look to the behaviour of others for cues	True	False
I often seek the advice of my friends to choose movies, books, or music	True	False
I laugh more when I watch a comedy with others than when alone	True	False
I have changed my opinions (or the way I do things) in order to please someone else	True	False
In order to get along and be liked, I tend to be what people expect me to be rather than anything else	True	False
I am good at games like charades or acting	True	False
I can change my behaviour to suit different people, and different situations	True	False
Even if I am not enjoying myself, I often pretend to be having a good time	True	False

If you have answered most of these questions as 'true' then you may be a 'high self monitorer'. This means you could be good at adjusting your behaviour to suit the environment you are in, and good at modelling your behaviour on others.

If you answered more items 'false' than 'true', this doesn't mean that you can't 'tune into' the behaviour of others, but may be selective in terms of when you do so.

Thought Starters…..

Think about all the people you have come into contact with at the Police College since arriving. List the names of at least <u>two </u>people in the space below who would make a good role model for you:

Choose <u>one </u>of the people listed above, and think about the specific behaviours that this person demonstrates in different situations. Use the prompts below to help guide your assessment of their behaviour.

How does this person….?	List the specific actions or behaviours this person does to make them a good role model:
Deal with conflict?	
Interact with others?	
Get their point across when talking?	
Make sure something is completed to a high standard?	
Convey that they are interested in you?	

Referring to the list of behaviours that are used by your role model, think about the kinds of behaviour or actions that you could develop in order to enhance your own performance, and/or more effectively 'fit' into your wing section. **Remember, to try and apply what your role model does to fit your own needs.** Write your suggestions on the following page.

How could I more effectively….?	List the specific actions or behaviours you could develop based on those used by your role model:
Deal with conflict?	
Interact with others?	
Get my point across when talking?	
Make sure something is completed to a high standard?	
Convey that I am interested in others?	

On-going exercise

Pick one situation a day for the next week that you could learn from. This could be observing someone else receiving feedback, either positive or negative; watching how someone else is carrying out a task, or watching someone handle an interpersonal situation very well or very poorly. Make a mental note of the following:

- What was the situation?
- What positive/negative behaviours were displayed?
- Was the person rewarded or punished? How?
- What can I learn from this?
- How can I adjust my behaviour for the better?

Active Listening (Tactic 7)

It has been said that the best communicators are actually the best listeners - not the best speakers. Remember that communication is a two-way process of expressing and receiving meaning between a speaker and a receiver.

In a sense, speaking is the easier of the two sides of the conversation. When you talk, you know what you are trying to say. However, when you listen, you must understand what the other person is saying. This requires you to use your understanding of the background, context and assumptions behind the communication. For many people, this is the harder part of the communication model.

Active Listening Techniques

There are many techniques to help you become an active listener. These include:

- **Allow the other person to talk.** Resist the urge to give your opinion or to spend a lot of time talking. Active listeners allow the other person to talk.

- **Don't interrupt.** Let the speaker finish what they are going to say. Don't suggest words when someone hesitates or pauses. Don't finish the other person's sentences, don't talk over the top of someone……all of these behaviours indicate that you have shut down listening and have already made up your mind about something or moved on in your thinking.

- **Show an interest**. One of the worst things that you can do is act like you would rather be somewhere else when someone is talking to you. The speaker can pick up cues that say you are not really interested in the discussion. When that happens, the speaker will tend to shut down and you will not end up with the information or insights you are looking for.

- **Don't overdo it.** Sometimes newcomers to the skill of listening can get carried away. They know they're supposed to have eye contact, so they'll stare so much that the speaker feels intimidated. All good things, including listening, requires moderation. Too much exaggerated listening is just as bad as, if not worse than, none at all.

- **Work on your non-verbal cues.** What you do with your eyes, face, hands, arms, legs, and posture sends out signals as to whether you are, or aren't, listening to, and understanding, what the other person is saying.

Positive non-verbal cues include things like:

✓ Looking into the speaker's eyes	✓ Keeping eyes wide open
✓ Smiling frequently	✓ Tilting head
✓ Raising eyebrows periodically	✓ Leaning towards the speaker
✓ Using expressive hand gestures when speaking	✓ Nodding agreement

There are some non-verbal expressions that can jeopardize a discussion, and which should be avoided.

Negative non-verbal cues include things like:

✓ Checking your watch often to show that you wish you were somewhere else	✓ Playing with objects like a pencil to show that you are preoccupied or bored
✓ Yawning to show that you are bored or tired	✓ Tapping your fingers to show impatience or boredom
✓ Crossing arms on chest	✓ Fidgeting in a chair

Listening Quiz

Check out your own listening skills by answering the questions below. You can chose between three possible answers to each question; **Yes, No** or **Unsure**. Circle the answer in each case that most applies to you. When someone is speaking to me, I sometimes….

1	Start talking before they have finished what they are saying	yes	unsure	no
2	Find it hard to concentrate when they are talking about something that does not interest me	yes	unsure	no
3	Try to listen, while doing something else	yes	unsure	no
4	Have to ask the person to repeat themselves because I did not hear what was said the first time	yes	unsure	no
5	Listen with different levels of concentration depending on who is talking	yes	unsure	no
6	Have been told to listen more carefully	yes	unsure	no
7	Suggest words or finish what they are saying	yes	unsure	no
8	Get distracted by what is going on around me	yes	unsure	no

If your answer to any of these questions is 'yes', then you have <u>selective listening</u>. In other words, you know how to listen, you just turn it on and off.

Thought Starters…….

In the space below, list 3 situations in which you would benefit from listening more carefully while you are at the Police College:

1	
2	
3	

What are the benefits of listening more carefully in the situations you have listed above?

In order to practice your listening skills, what behaviours could you STOP and START doing while at College?

Behaviours I could stop doing:

Behaviours I could start doing:

As a Police Officer, list all the situations where listening is going to be of benefit to you?

1	
2	
3	

As a Police Officer, what are the implications of not developing your listening skills?

Remember:
Familiarity with a task can reduce your sensitivity to it. Where you are called upon to deal with a similar situation many times, it is important to LISTEN and treat each situation on its own merits.

Over the next fortnight, practice speaking only 20% of the time and listening 80% of the time and see what happens.

Active Listening Exercise

Allocate the roles of speaker, listener and observer.
Read the instructions below and have a go

Speaker

For two minutes, share something that is of interest to you; obviously not something that is private or that might be embarrassing, but something that you know something about. Some suggestions include:

- o   An exciting experience
- o   Your family/friends
- o   A hobby or interest you have

Listener

Use the skills of active listening to encourage the speaker to fully express his or her views on the subject. Concentrate on the verbal and non-verbal cues you can use in order to:

- o   fully understand the information the speaker is communicating
- o   let the speaker know that you understand

Observer

Your task is to observe the listener's verbal and non-verbal skills, assess his or her understanding of the speaker's message, and give a review at the end.

Keep track of the listener's responses and assess his or her ability to encourage the speaker to fully express their opinion.

Feed back to the listener how effectively you interpreted their listening skills.

Switch roles, and have another go…this time try to demonstrate poor listening skills and see how the speaker feels….

Appendix D: Leader-Member Exchange Material

(For use with NZ Police Wing 229 only)

Instructor Checklist (to support recruit introduction at week 1)

Points to Cover	Notes and Action Points	Issues for discussion
Establish Rapport	• Introduce self, share personal background information • Invite recruit to share a little about themselves and motivation for joining the Police	

Working Together	• Explain your role and reinforce the importance of your responsibilities as teacher, guide, support and mentor
	
	• Explain to each recruit your contract for working together:
	  - two-way exchange
	  - open and honest
	  - supportive
	  - confidential
	
	• Outline your expectations of the recruit over the next 18 weeks in terms of:
	  - helping self (i.e. asking for help when need it)
	  - being a support to others
	  - contributing fully to life at College
	  - attending to all study/learning obligations
	
	• Outline your role in terms of judging their performance and the criteria that is used to do this	

Personal Situation	• Question recruit on their feelings about being at College:
	  - Is College what you expected? (check their reality)
	  - What are the things you are most worried about? Give direction/advice
	
	• Review personal circumstances – (changes to marital status, issues with children etc)
	
	• Review each recruit's support network outside College (recruits without a strong network may require additional support in terms of fitting in/adjusting)
	
	• What cultural issues need to be addressed?	

Points to Cover	Notes and Action Points	Issues for discussion
Performance Standards	• Review with recruit their: - academic abilities - Learning styles, study skills (consider the need for any early intervention for those not familiar with study, or ESOL recruits • Discuss the purpose and format of future performance review meetings - Advise recruit that they will be asked to prepare for these • Make reference to the Self Assessment document and Study Skills Guide	
Support Available	• Does not have to be a full explanation as this is covered elsewhere in the Induction (e.g. Welfare Officer, Chaplain, Human Resources, Women's Support Network, Mentoring, Iwi Liaison Officer, Sexual Harassment Contact Officers)	
What Support Recruit Needs	• Ask the recruit it they expect to have any difficulty with: - Study and learning - Physical requirements - Driving/Firearms - Academic - Work/life balance • Take specific notes as to where recruit might have difficulty and give specific direction about what they can also do to help themselves.	
Personal Philosophies	• Do they expect to have any difficulty over the use of force? • Ethical standards required of Police – conflicts?	
Recruit Questions	• Is there anything that hasn't been covered that the recruit would like to ask? • Explain next steps and close discussion	

Specific Areas of Strength E.g. Skill, attitude or behavioural areas where recruit may have a strength and could be a role model for others. Be as specific as possible	Specific Areas of Development E.g. Skill, attitude or behavioural areas where recruit may require support or direction beyond the norm. Be as specific as possible	Follow-up Required and When E.g. What support is required and by whom? (Welfare Officer, Chaplain, other?). When is this required?

Appendix D: Leader-Member Exchange Material

(For use with NZ Police Wing 229 only)

Instructor Checklist (To support instructor-recruit feedback session at 6-weeks, 12-weeks, and 18-weeks)

Purpose of this Session:

- The purpose of this session is to review the performance of each recruit up to this point in time, and invite their assessment of their own performance.
- To jointly set some new performance goals for the next 6 weeks.

Two-Way Feedback Guidelines:

1. **Set the Scene**
   - Outline the purpose of the session
   - Remind the recruit of your contract for working together (confidential, two-way exchange, open and honest, supportive)
2. **Invite Self Assessment**
   - Guide recruit self-assessment through open questions…. "How do you think you are going with….?"…Where do you think you are having difficulty?"
   - Summarise to check understanding…. "So what you are telling me is ….." "In summary then, you are saying …."
3. **Give Your Feedback**
   - Ensure your feedback is specific, accurate and time-bound (i.e. what time period in the last 6 weeks does your feedback relate to)
   - Link your feedback to recruit self assessment to explore differences, similarities and get a shared understanding
4. **Action Plan**
   - Follow the action planning process at the back of this document to confirm proposed solutions and suggestions to improve performance or continue to develop self further
   - When asking for a change in behaviour, specify clearly WHAT behaviour you are referring to, WHY it is important to change, HOW MUCH you want it to change and BY WHEN you want this change to take place
   - End on a positive note, thank the recruit for their contribution, ask if they have any other questions.
   - Close discussion

Think about the skill development and behaviour of the recruit over the last 6 weeks. Put a tick in each box that best represents where you think this recruit currently sits. Be prepared to share your thoughts with the recruit.

Behavioural Rating

	Needs Support	Developing	On-Target	Exceeding
Energy/Motivation Motivation and energy to excel at a high level	☐	☐	☐	☐
Interpersonal Relationships Includes language, self-awareness, building rapport, listening	☐	☐	☐	☐
Planning/Organising Administrative skill, following police procedures accurately/timely	☐	☐	☐	☐
Resilience/Coping Working under stress, remaining calm and collected	☐	☐	☐	☐
Decision Making Includes thinking logically, making well informed decisions, explaining rationale for decisions	☐	☐	☐	☐
Professionalism The professional and ethical standards required of a police officer	☐	☐	☐	☐

Skill Rating

	Needs Support	Developing	On-Target	Exceeding
Academic Ability Meeting academic course requirements	☐	☐	☐	☐
Written/Oral Communication Organising ideas clearly in a written/verbal format	☐	☐	☐	☐
Practical Incident Handling Includes incident control, incident assessment and action	☐	☐	☐	☐

Developmental Action Plan (to complete in the feedback session)

Working with the recruit, agree the actions that need to take place in order to close any developmental gaps. This will form the starting point for your next review with this recruit. Note, that even high achieving recruits may still have areas for development.

OBJECTIVE SETTING FORM		
DEVELOPMENT *What area of recruit performance needs to be developed in the next 6 weeks?*	**ACTION** *What specific actions need to come about for the required change to be made?*	**RESOURCES** *What support is needed to make this change and by whom?*

Thought Starters…..?

What is going to be the hardest change to bring about/the easiest and why?

What areas are going to be the most beneficial to work on in terms of future success as a police officer?

<u>Appendix D: Leader-Member Exchange Material</u>

(For use with NZ Police Wing 229 only)

<u>Recruit Self Assessment Form</u> (To support instructor-recruit feedback session at 6-weeks, 12-weeks, and 18-weeks)

Name: **Date:**   **Instructor:**

Purpose of Your Performance Review:

- The purpose of this session is to review your performance over the last 6 weeks with your Section Instructor, and to jointly set some new performance goals for the next 6 weeks.

Some Key Points to Get the Best out of Your Performance Discussion:

- Be open and honest with yourself in terms of where your strengths and areas for development might lie…in this way, whatever support is required can be directed into the correct areas.
- Spend some time before meeting with your Instructor thinking about what you want to get out of this meeting, and the specific learning you want to come away with.
- Build you self-awareness by inviting the feedback of any colleagues in your wing section whose opinions you value. Be specific in the areas you would like feedback, and make it clear you would like an honest answer.
- Think carefully about the parts of the Police training programme that you have particularly liked so far, and the bits that you haven't enjoyed. This may be a good clue as to where your strengths and areas for development might lie, as we tend to enjoy the things we are good at.
- Think about the parts of the Police programme that you have had to get help from other recruits or your Instructor….what parts of the programme have you had to spend more time trying to understand than other recruits?
- When thinking about your strengths and areas for development, don't just think about your skills, but think about your behaviour and attitude as well.

Think about your skill development and behaviour over the last 6 weeks. Put a tick in each box that best represents where you think you currently sit. Be prepared to share your thoughts with your Section Instructor.

Behavioural Rating

	Needs Support	Developing	On-Target	Exceeding
Energy/Motivation Motivation and energy to excel at a high level	☐	☐	☐	☐
Interpersonal Relationships Includes language, self-awareness, building rapport, listening	☐	☐	☐	☐
Planning/Organising Administrative skill, following police procedures accurately/timely	☐	☐	☐	☐
Resilience/Coping Working under stress, remaining calm and collected	☐	☐	☐	☐
Decision Making Includes thinking logically, making well informed decisions, explaining rationale for decisions	☐	☐	☐	☐
Professionalism The professional and ethical standards required of a police officer	☐	☐	☐	☐

Skill Rating

	Needs Support	Developing	On-Target	Exceeding
Academic Ability Meeting academic course requirements	☐	☐	☐	☐
Written/Oral Communication Organising ideas clearly in a written/verbal format	☐	☐	☐	☐
Practical Incident Handling Includes incident control, incident assessment and action	☐	☐	☐	☐

Developmental Action Plan (to complete in the feedback session)

With your Section Instructor, agree the actions that need to take place for you to close any developmental gaps. Write these in the space below. This will form the starting point for your next performance review.

OBJECTIVE SETTING FORM		
DEVELOPMENT *What area of recruit performance needs to be developed in the next 6 weeks?*	**ACTION** *What specific actions need to come about for the required change to be made?*	**RESOURCES** *What support is needed to make this change and by whom?*

Thought Starters…..?

What is going to be the hardest change to bring about/the easiest and why?

What areas are going to be the most beneficial to work on in terms of future success as a police officer?

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