

**AN IDENTIFICATION OF FACTORS
INFLUENCING POLICE WORKPLACE
MOTIVATION**

Vernon Sommerfeldt, Barrister-at-Law (Qld. Barrister's
Board),

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The findings, opinions and conclusions made in this report are wholly those of the writer and do not represent the findings, opinions or conclusions of the Queensland Police Service.

ABSTRACT

Police work tasks are diverse and require the ability to take command, demonstrate leadership, make serious decisions and be self directed (Beck, 1999; Brunetto & Farr-Wharton, 2002; Howard, Donofrio & Boles, 2002). This work is usually performed in pairs or sometimes by an officer working alone. Operational police work is seldom performed under the watchful eyes of a supervisor and a great amount of reliance is placed on the high levels of motivation and professionalism of individual officers. Research has shown that highly motivated workers produce better outcomes (Whisenand & Rush, 1998; Herzberg, 2003). It is therefore important that Queensland police officers are highly motivated to provide a quality service to the Queensland community.

This research aims to identify factors which motivate Queensland police to perform quality work. Researchers acknowledge that there is a lack of research and knowledge in regard to the factors which motivate police (Beck, 1999; Bragg, 1998; Howard, Donofrio & Boles, 2002; McHugh & Verner, 1998). The motivational factors were identified in regard to the demographic variables of; age, sex, rank, tenure and education. The model for this research is Herzberg's two-factor theory of workplace motivation (1959). Herzberg found that there are two broad types of workplace motivational factors; those driven by a need to prevent loss or harm and those driven by a need to gain personal satisfaction or achievement. His study identified 16 basic sub-factors that operate in the workplace.

The research utilised a questionnaire instrument based on the sub-factors identified by Herzberg (1959). The questionnaire format consists of an initial section which sought demographic information about the participant and is followed by 51 Likert scale questions. The instrument is an expanded version of an instrument previously used in doctoral studies to identify sources of police motivation (Holden, 1980; Chiou, 2004). The questionnaire was forwarded to approximately 960 police in the Brisbane, Metropolitan North Region.

The data were analysed using Factor Analysis, MANOVAs, ANOVAs and multiple regression analysis to identify the key sources of police motivation and

to determine the relationships between demographic variables such as: age, rank, educational level, tenure, generation cohort and motivational factors. A total of 484 officers responded to the questionnaire from the sample population of 960.

Factor analysis revealed five broad Prime Motivational Factors that motivate police in their work. The Prime Motivational Factors are: Feeling Valued, Achievement, Workplace Relationships, the Work Itself and Pay and Conditions. The factor Feeling Valued highlighted the importance of positive supportive leaders in motivating officers. Many officers commented that supervisors who only provided negative feedback diminished their sense of feeling valued and were a key source of de-motivation. Officers also frequently commented that they were motivated by operational police work itself whilst demonstrating a strong sense of identity with their team and colleagues. The study showed a general need for acceptance by peers and an idealistic motivation to assist members of the community in need and protect victims of crime. Generational cohorts were not found to exert a significant influence on police motivation. The demographic variable with the single greatest influence on police motivation was tenure. Motivation levels were found to drop dramatically during the first two years of an officer's service and generally not improve significantly until near retirement age.

The findings of this research provide the foundation of a number of recommendations in regard to police retirement, training and work allocation that are aimed to improve police motivation levels. The five Prime Motivational Factor model developed in this study is recommended for use as a planning tool by police leaders to improve motivational and job-satisfaction components of police Service policies. The findings of this study also provide a better understanding of the current sources of police motivation. They are expected to have valuable application for Queensland police human resource management when considering policies and procedures in the areas of motivation, stress reduction and attracting suitable staff to specific areas of responsibility.

TABLE OF CONTENTS

AN IDENTIFICATION OF FACTORS INFLUENCING POLICE WORKPLACE MOTIVATION	i
Disclaimer.....	ii
Abstract	iii
Table of Contents	v
List of Figures	x
List of Tables	xii
Statement of Original Authorship	xv
Acknowledgements	xvi
CHAPTER 1	1
BACKGROUND AND RESEARCH QUESTIONS	1
QUEENSLAND POLICE WORK ENVIRONMENT	1
RATIONALE AND SIGNIFICANCE OF THE STUDY	2
RESEARCH QUESTIONS	12
PROBLEM IDENTIFICATION AND CONCEPTUAL MODEL APPLICABLE TO THE QPS	13
RESEARCH MEHTODOLOGY	16
DEFINITION OF TERMS	17
OVERVIEW OF STUDY	18
CHAPTER 2	21
LITERATURE REVIEW	21
INTRODUCTION	21
CONCEPT OF MOTIVATION	22
RELATIONSHIP BETWEEN MOTIVATION, JOB-SATISFACTION AND COMMITMENT	24
HISTORY OF WORKPLACE MOTIVATION THEORIES	26
LINKS BETWEEN WORKPLACE MOTIVATION AND PRODUCTIVITY	28
THEORIES OF MOTIVATION	29

Needs Theory	30
Instrumentality Theory	33
Equity Theory	34
Reinforcement Theories (Behaviourism)	34
Goal Setting Theory	35
MOTIVATION AND GENERATION	36
MOTIVATING PUBLIC SERVANTS	45
MOTIVATIONAL STRATEGIES IN THE WORKPLACE	47
THE ROLE OF POLICE LEADERS IN MOTIVATING OFFICERS....	55
RESEARCH IN POLICE LEADERSHIP STYLES	58
RECENT RESEARCH ON POLICE MOTIVATION AND JOB-SATISFACTION	61
CONCLUSION	75
CHAPTER 3	79
METHODOLOGY	79
INTRODUCTION	79
QUANTITATIVE AND QUALITATIVE RESEARCH	80
OVERVIEW OF METHODOLOGY	81
SAMPLE SIZE AND SELECTION	82
DATA COLLECTION PROCEDURES	84
LIMITATIONS OF THE STUDY	85
ETHICAL CONSIDERATIONS	87
METHOD OF ANALYSIS AND QUESTIONNAIRE DATA	89
OPEN ENDED QUESTIONS	90
CHAPTER 4	93
RESEARCH INSTRUMENT	93
INTRODUCTION	93
QUESTIONNAIRE DESIGN RATIONALE	93
DEVELOPMENT OF THE QUESTIONNAIRE	97
PILOT TEST	103
VALIDITY AND RELIABILITY OF THE WRITTEN QUESTIONNAIRE	104

ANALYSIS	107
Section 2 of the Questionnaire-Questions from Holden's questionnaire	107
Section 3 of the Questionnaire-Direct responses to Herzberg's sub-factors	111
CHAPTER 5	115
ANALYSIS AND RESULTS	115
INTRODUCTION	115
DESCRIPTIVE STATISTICS	117
Demographics	117
Overall Job-satisfaction/Dissatisfaction	122
FACTOR ANALYSIS	124
INDEPENDENT VARIABLE GROUPINGS FOR ANALYSIS	125
NORMALITY ASSESSMENT OF THE FIVE DEPENDENT VARIABLES	136
CORRELATION OF THE VARIABLES	140
MANOVA RESULTS OF THE FIVE PRIME MOTIVATIONAL FACTORS	144
ANOVA RESULTS	150
BETWEEN GROUP COMPARISONS FOR AGE	150
BETWEEN GROUP COMPARISONS FOR TENURE	153
BETWEEN GROUP COMPARISONS FOR VARIABLE SEX	157
BETWEEN GROUP COMPARISONS FOR RANK	158
BETWEEN GROUP COMPARISONS FOR EDUCATION	161
SUMMARY OF ANOVA	162
MULTIPLE REGRESSION RESULTS	164
CHECKING ASSUMPTIONS FOR ANALYSIS BY REGRESSION ..	164
FINDINGS FROM MULTIPLE REGRESSION ANALYSIS	171
SUMMARY OF QUANTITATIVE RESULTS	176
QUALITATIVE ANALYSIS AND RESULTS	176
CONCLUSION	180
CHAPTER 6	185

DISCUSSION	185
INTRODUCTION	185
OVERVIEW AND MODEL	186
Feeling Valued	191
Achievement	193
Work Relationships	195
The Work Itself	196
Pay and Conditions	197
HERZBERG AND THE PRIME MOTIVATIONAL FACTORS	199
UTILITY OF THE MODEL	200
MOTIVATION ACCORDING TO DEMOGRAPHIC VARIABLES	200
AGE	201
Age and <i>Feeling Valued</i>	203
Age and <i>Achievement</i>	209
Age and the <i>Work Itself</i>	211
Age and <i>Pay and Conditions</i>	216
Overall Impact of Age on the Prime Motivational Factors	220
GENDER	223
TENURE	227
RANK	239
EDUCATION	246
DOES GENERATIONAL COHORT INFLUENCE MOTIVATION? ...	250
Generation	250
IMPLICATIONS FOR THE QPS	254
RESEARCH METHODS AND INSTRUMENT	262
CONCLUSION AND NEXUS BETWEEN RESEARCH RESULTS AND LITERATURE	263
CHAPTER 7	267
RECOMMENDATIONS AND CONCLUSION	267
INTRODUCTION	267
RESPONSES TO RESEARCH QUESTIONS	269
RECOMMENDATIONS	274
Human Resources Practice Management Recommendation	

No. 1	275
Human Resources Practice Management Recommendation No. 2	276
Human Resources Practice Management Recommendation No. 3	276
Retirement Policy Recommendation No. 1	278
Retirement Policy Recommendation No. 2	279
Leadership Training Recommendation	280
Future Research Recommendation No. 1	281
Future Research Recommendation No. 2	282
Future Research Recommendation No. 3	282
LIMITATIONS OF THE STUDY	283
CONCLUSION	284
REFERENCES	286
APPENDIX A: Previous Studies using Herzberg's Theory	- 317-
APPENDIX B: Graphic Comparison of Job-satisfaction and Job-dissatisfaction in Herzberg's 1959 study	- 338
-	
APPENDIX C: Questionnaire used in this study	- 340
-	
APPENDIX D: Introduction to the e-mail Questionnaire	- 346
-	
APPENDIX E: Introduction to the paper copy questionnaire	- 348 -
APPENDIX F: Participant Information Sheet	- 350
-	
APPENDIX G: QUT Research Ethics Committee Approval Certificate	- 353
-	
APPENDIX H: Factor Analysis Pattern Matrix	- 355
-	

LIST OF FIGURES

Figure 1	Applied Herzberg's model of Workplace Motivation	- 15 -
Figure 2	Histogram of Motivation from <i>Feeling Valued</i>	-135-
Figure 3	Q-Q Plot of Distribution of Scores for <i>Feeling Valued</i>	-136-
Figure 4	Histogram of Motivation for <i>Achievement</i>	-136-
Figure 5	Q-Q Plot of Distribution of Scores for <i>Achievement</i>	-137-
Figure 6	Histogram of Motivation for <i>Work Itself</i>	-137-
Figure 7	Q-Q Plot of Distribution of Scores for <i>Work Itself</i>	-138-
Figure 8	Histogram of Motivation from <i>Relationships</i>	-138-
Figure 9	Q-Q Plot of Distribution of Scores for <i>Relationships</i>	-139-
Figure 10	Histogram of Motivation from <i>Pay and Conditions</i>	-139-
Figure 11	Q-Q Plot of Distribution of Scores for <i>Pay and Conditions</i>	-140-
Figure 12	P-P Plot for Feeling Valued	-166-
Figure 13	Scatter Plot for Feeling Valued	-166-
Figure 14	P-P Plot for Motivation from Achievement	-167-
Figure 15	Scatter Plot for Motivation from Achievement	-167-
Figure 16	P-P Plot for Motivation from the Work Itself	-168-
Figure 17	Scatter Plot for the Work Itself	-168-
Figure 18	P-P Plot for Workplace Relationships	-169-
Figure 19	Scatter Plot for Workplace Relationships	-169-
Figure 20	P-P Plot for Pay and Conditions	-170-
Figure 21	Scatter Plot for Pay and Conditions	-170-
Figure 22	Prime Motivational Factor Model for Police	- 190 -
Figure 23	One way ANOVA factor <i>Feeling Valued</i> and <i>Age</i>	- 205 -
Figure 24	One way ANOVA factor <i>Achievement</i> and <i>Age</i>	- 209 -

Figure 25	One way ANOVA factor <i>Work Itself</i> and <i>Age</i>	- 211 -
Figure 26	One way ANOVA factor <i>Work Relationship</i> and <i>Age</i>	- 212 -
Figure 27	One way ANOVA factor <i>Pay and Conditions</i> and <i>Age</i>	- 216 -
Figure 28	One way ANOVA factor <i>Feeling Valued</i> and <i>Tenure</i>	- 234 -
Figure 29	One way ANOVA factor <i>Achievement</i> and <i>Tenure</i>	- 235 -
Figure 30	One way ANOVA factor <i>Work Relationships</i> and <i>Tenure</i>	- 236 -
Figure 31	One way ANOVA factor <i>Work itself</i> and <i>Tenure</i>	- 237 -
Figure 32	One way ANOVA factor <i>Pay and Conditions</i> and <i>Tenure</i>	- 238 -
Figure 33	One way ANOVA factor <i>Feeling Valued</i> and <i>Rank</i>	- 240 -
Figure 34	One way ANOVA factor <i>Achievement</i> and <i>Rank</i>	- 240 -
Figure 35	One way ANOVA factor <i>Work Itself</i> and <i>Rank</i>	- 241 -
Figure 36	One way ANOVA factor <i>Workplace Relationships</i> and <i>Rank</i>	- 241 -
Figure 37	One way ANOVA factor <i>Pay and Conditions</i> and <i>Rank</i>	- 242 -
Figure 38	One way ANOVA factor <i>Feeling Valued</i> and <i>Education</i>	- 247 -
Figure 39	One way ANOVA factor <i>Achievement</i> and <i>Education</i>	- 247 -

LIST OF TABLES

Table 1	Sources of Workplace Motivation	- 53 -
Table 2	Commitment Intervention Mode	- 68 -
Table 3	Distribution of Ranks in Metropolitan North Region 2005	- 82 -
Table 4	Frequency of responses for male and female officers	- 118 -
Table 5	Response population by Rank	- 119 -
Table 6	Response population by Age	- 120 -
Table 7	Response population by Tenure	-121 -
Table 8	Response population by Education	- 122 -
Table 9	Job-satisfaction and job dissatisfaction levels	- 123 -
Table 10	General level of workplace motivation	- 124 -
Table 11	Prime Motivational Factors	- 125 -
Table 12	Contribution of Herzberg's sub-factors to the Prime Motivational Factors	- 126 -
Table 13	Tenure Groupings for Analysis	-129 -
Table 14	Age Groupings for Analysis	-131 -
Table 15	Education Groupings for Analysis	-132.-
Table 16	Rank Groupings for Analysis	-134 -
Table 17	Spearman's Non-Parametric Correlations between Prime Motivational Factors	-141 -
Table 18	Pearson's Product-Moment correlation between Prime Motivational Factors	-141 -
Table 19	Pearson's Product-motion correlation between Independent Variables	-143 -
Table 20	Contribution of independent variables to the factor <i>Feeling Valued</i>	- 172 -
Table 21	Contribution of independent variables to the factor <i>Achievement</i>	- 172 -

Table 22	Contribution of independent variables to the factor <i>Pay and Condition</i>	- 173 -
Table 23	Contribution of independent variables to the factor <i>Work Itself</i>	- 174 -
Table 24	Contribution of independent variables to the factor <i>Work Relationships</i>	- 175 -
Table 25	Comment frequency for elements of motivation	- 177 -
Table 26	Relationship between qualitative comments and the five factors	- 179 -
Table 27	Comparison of general motivation and de-motivation Levels	- 187 -
Table 28	Gender and motivation from Feeling Valued and Achievement	- 223 -
Table 29	Contribution of Independent Variables to Prime Motivational Factors	- 229 -

STATEMENT OF ORIGINAL AUTHORSHIP

The work contained in this thesis has not been previously submitted to meet requirements for an award at this or any other higher education institution. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made.

Signature: _____

Date: _____

ACKNOWLEDGMENTS

Like hunters pursuing the goose that lays golden eggs, transformational leaders across industries, cultures and continents search for an understanding of the sources of their worker's motivation. While the benefits of such an understanding to industry have been well documented in literature, the personal benefit to workers of a workplace that nurtures a culture of motivation has received little attention. Most people spend a third of their lives in the workplace and so in the inspirational language of the American Declaration of Independence a workplace that fosters motivation can contribute significantly to that drive at the heart of every human life: the pursuit of happiness.

The intention of this doctoral research is to discover the workplace factors that motivate police. At different stages the research has benefited from support provided by a number of people who deserve recognition. Study like this takes years and I thank my wife Sue, for her patience in tolerating mounds of journals and other literature on motivation on tables and elsewhere around our home. I thank former Assistant Commissioner, George Nolan and Assistant Commissioner Peter Martin for their appreciation of the potential value of the research and their willingness to allow Metropolitan North Region to be used as the research site.

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CHAPTER 1

BACKGROUND AND RESEARCH QUESTIONS

Employers (of the future) will need to carefully consider ways of retaining employee motivation and making better use of the skills and experience of older employees (Lynch, 2005, p.3).

QUEENSLAND POLICE WORK ENVIRONMENT

The Queensland Police Service (QPS) provides a public service. Its purpose is to build a safer community. To do so it maintains a network of over 9,000 police officers throughout the 1.7 million square kilometers of Queensland. The total expenditure budget for the year ending in 2003 was \$ 936,834,000 (QPS, 2003, p. 8). The major component of this expenditure was \$735,709,000 (78.5%) employee expenses (QPS, 2003, p. 84). The total QPS income for 2008-09 was 1,520.7 million dollars of which 1,180 million dollars (77.6%) was expended on personnel costs (QPS, 2009). Of the total number of Queensland police officers in 2009; 2,011 are at the rank of sergeant, 2,812 are Senior Constables and 3,109 are Constables. The vast majority of police at these ranks perform operational work. They answer calls for assistance from the community, investigate crime, apprehend offenders, minimise road carnage by enforcement of traffic laws, conduct searches and rescues and control in emergency situations.

The QPS delivers a 24 hour service to almost 4 million Queenslanders spread across approximately one quarter of Australia's land mass. The planned

outcome of the QPS is to build safer and more supportive communities, with particular emphasis on reduction of criminal activities. The delivery of this outcome relies on labour intensive strategies like proactive problem-oriented policing, criminal investigation and prosecution, conducting operations into organised crime and major crime, traffic management and responses to public safety and calls for assistance.

The nature of these functions requires police to generally act in pairs or small teams where a high degree of autonomy, independence, ability to make serious decisions and self direction are required (Beck, 1999; Brunetto & Farr-Wharton, 2002; Howard, Donofrio & Boles, 2002). As indicated by the budget breakdown the principle resource responsible for delivering these QPS outcomes is not equipment or materials but the police officers themselves. The majority of operational police work is performed by constables and their supervising sergeants. Hence the level of individual motivation of each officer is a major factor contributing to the QPS final outputs.

RATIONALE AND SIGNIFICANCE OF THE STUDY

There are three reasons why this study is important: firstly, because management understanding of employee sources of motivation is essential for maintaining a productive work environment; secondly, because management's understanding of employee motivation is necessary to increase retention rates and recruitment applications by maximising job-satisfaction; and thirdly, to effectively manage a diverse workforce police managers may need to understand the influence

of generation and age difference on sources of workplace motivation. Retention and recruit application numbers are both current issues of serious concern to the QPS as the pending retirement of baby boomers will leave a skills gap in the interim, taking with them levels of experience, whilst recruiting quality young staff from a diminishing youth population has progressively become more difficult (Jorgensen, 2005).

This study is unique in that few studies have attempted to identify the specific sources of police motivation and an extensive search of the literature has failed to locate any police studies in Australasia. Only two prior studies were located; one was in Houston in 1980 (Holden, 1980) and one in Taiwan in 2004 (Chiou, 2004). Neither of these considered the impact of generational differences on police motivation. The question of generational differences is a topical debate and there is no broad agreement among scholars whether distinct generational cohorts with their own values and behaviours even exist. One view argues that significant attitudinal and value differences exist between generations (Zemke, Raines & Filipczak 2000; Arsenault, 2004; Glass, 2007; Westerman, 2007) while the opposing view argues that empirical study has not shown any lifelong distinctions and that any apparent differences are due to either, age (life stage); (Jorgensen, 2005) such that when current Generation Y people reach their fifties, they will exhibit attitudes and values similar to current baby boomers or due to erroneous cultural stereotypes (Appelbaum, Serena & Shapiro 2005; Niemela-Nyrhinen, 2007).

For QPS management then, police motivation is a highly important issue which is closely linked to meeting organisational outcomes. Employees committed

to their organisations are acknowledged as better performers (Whisenand & Rush, 1998; Herzberg, 2003). Commitment to an organisation has been found by research to have a significant influence on the employee's attitudes and behaviours where committed employees are more productive (Simintiras, Lancaster & Cadogan, 1994).

Modern organisations must understand what motivates their employees if they are to remain competitive and effective (Costa, 2003). Organisations with autocratic X-Theory management cultures are unlikely to survive in a volatile global and responsive environment (Costa). An example of how the volatile global work environment has impacted on policing is the practice now followed by a number of Australian police services of actively recruiting experienced police from other Australian and international jurisdictions. Applicants are offered opportunities to "transfer" to the QPS "at rank" and immediately after completion of a short introductory course to commence work at the rank of a fourth year or fifth year constable or sergeant. Ten years ago it was not possible to relocate from one police organisation to another other than by resigning and restarting the career again as a police recruits.

Another aspect of the contemporary work environment is the devolution of decision making and greater reliance placed on the innovation, good judgment and motivation of employees. Costa (2003, p. 4) comments: "Managers must understand the motivational needs of people to the level that they can be accommodated, before these people can be expected to perform to their maximum potential".

Interest in researching worker motivation diminished in the early 1960s as research interest turned to other aspects of job satisfaction and to job commitment and organisational commitment. The workplace has changed significantly in that time as has Australian society. Australia is now a diverse multi-racial and multi-cultural nation with omnipresent laws prohibiting discrimination and enforcing citizen's rights to access information and challenge administrative decisions. In the last two decades society has witnessed tumultuous changes to the educational landscape and industrial regimes. Studies which identified sources of worker motivation in the past may not be relevant to today's workforce (Kovack, 1987). It is important that managers have an understanding of the factors that have been shown to impact on the motivation of their workforce and that, that information be current. There is presently a dearth of information on the specific factors which currently motivate and de-motivate police in their workplace (Beck, 1999; Bragg, 2003; Howard, Donofrio & Boles, 2002). In fact the research in this area is overshadowed by research of private sector employees (Pollock, Whitbred & Contractor, 2000).

The dynamic nature of today's workplace requires managers to be skilled in change management and to move from a traditional manager's role to that of a leader (Cole, 2001; MacDonald, 2001; Swanson, Terito & Taylor, 2001). Leaders have the capacity to maximise their units output by motivating employees (Cole; MacDonald; Swanson, Terito & Taylor). To maintain this motivation in an environment that is continually changing leaders must possess a good appreciation of the factors that are sources of satisfaction and dissatisfaction among staff (Costa, 2003). Motivation is intrinsically a difficult and complex phenomenon (Costa). The rapidly evolving environment has made the task of motivating

workers both more challenging and more essential. Reflecting society itself, employees have become more complex, demanding and sophisticated. An organisation that fails to constantly review and improve itself to adapt to the changing world will eventually become obsolete and be eliminated by competitors (Lowenthal, 1994).

Research has found that whilst police officers are generally satisfied with their work tasks and colleagues they are not committed to or satisfied with the organisational goals (Beck, 1999). This lack of commitment has impacted negatively on effective and efficient policing with behaviours like absenteeism, turnover, stress, cynicism, alienation and unethical decision making (Beck). Beck observed this characteristic through all Australian police organisations. In 1991 research by Wilson found that there was no significant difference between motivational levels of general duties police officers and that of police from specialist areas. Motivation is thus a problem across both general duties areas and specialist police units. This may conflict with more recent research of Queensland police which indicated that specialist police were less satisfied with promotion and career opportunities than general duties officers (Bragg, 2003).

A comprehensive study in Australian and New Zealand concluded that in both countries police officer's commitment decreased with increasing length of service (Beck, 1999). The same study found that higher levels of commitment were linked with expectations of positive benefits. The study reported that police first year constables commence duty with initial high levels of commitment but that those levels drop significantly in the first 9 weeks of duty (Beck). Beck's research has shown that the problem of lack of commitment is not limited to sworn

police officers but includes non sworn public servants as well. The concepts of organisational commitment and job satisfaction are closely linked to motivation. Some researchers do not distinguish between motivation and job satisfaction (Herzberg, Mausner & Snyderman, 1959).

Police managers face growing pressure to justify budget expenditure with quantified proof of quality service delivered to the community (Halsey & Osborne, 1992; Whisenand & Rush, 1998). To achieve this they must understand the specific factors which motivate their subordinates and how to translate this knowledge into increased productivity. Individual motivation however is something which can not be forced (Nicholson, 2003; Landy, 1989). In this sense Hershey (1993) argued that so called industrial motivation strategies are not truly motivational but attempts by management to persuade employees to behave in a particular way just as commercial advertising seeks to persuade the target audience to behaviour in a particular way.

Most motivational tools such as bonus incentives and team rewards commonly used by private sector managers are not available to police managers or other public sector managers (Halsey & Osborne, 1992). Awards, unions and inflexible departmental policies prevent the public sector worker receiving bonuses, higher pay or rewards for higher performance. Salaries are not individually negotiated and poor performers are paid and rewarded as well as high performers. Money and security are no longer seen as incentives **that drive** motivation for many employees as they are now regarded not as rewards but as rights (Herzberg, 2003). This may be especially the case in public sector areas.

In the public sector, discipline processes are not simple and administrative law rights are applied in full in favour of the employee. The performance appraisal systems in public sector organisations like the QPS are generally ineffective and mainly followed to comply with the letter of policy (Rector & Kleiner, 2002). Research within the QPS indicates that performance appraisal is generally regarded as an ineffective and time wasting procedure (Bragg, 2003). Employment in the public service is usually secure after a probation period for even very poor performers (Rector & Kleiner). It is widely acknowledged that there is a need to lift the performance of public sector employees above the minimum standard but that motivating employees in government organisations is generally a difficult task (Rector & Kleiner). Given Beck's (1999) research finding in regard to the general lack of police organisational commitment, Australian police officers appear to fall into this category of public sector employees.

Research has shown that employees from different organisations may be motivated by different factors (Wright, 2001). It has long been presumed that people in public sector organisations like the police are motivated by altruistic, social welfare and justice issues and therefore research based on private sector employees may be unreliable when applied to the public sector (Wright). In both sectors employees who are motivated are generally regarded as more productive (Lindner, 1995). There is therefore a need for QPS management to better understand the particular factors which motivate police.

In the absence of empirical evidence it appears that current management and incentive policies in Australian police services are largely based on

assumptions. Previous studies have shown that there is a scarcity of information on factors which exert positive and negative effects on police motivation (Bragg, 2003; Beck, 1999; Howard, Donofrio & Boles, 2002). Although managers are usually confident that they understand employee motivation, their perceptions are usually erroneous (Kovach, 1980, 1987; Bent, Seaman, Ingram & Forbes, 1999, 2000). The ratio of knowledge to speculation in this area has been described as dismal (Herzberg, 2003). Managers have been cautioned to avoid assuming that what motivates them must also motivate their employees (Wessler, 1984). It is important in a practical sense that those who formulate departmental policies as well as those who aspire to lead, understand the sources of satisfaction for the police officers they direct. The authoritarian, disciplinary approach to management may work well in the short term but eventually will result in workers who resist change, commit sabotage or leave the organisation taking their experience and skills with them. There are many positive incentives that can be applied to motivate the workforce. Most of these incentives like bonuses, training programs, and structured incentive schemes are expensive and unwise to apply when management doesn't understand the workers sources of motivation and have little real idea if the incentive will work (Herzberg, 2003; Kovah, 1999). Myers (1964) alerted managers to the dangers of a workplace that fails to provide opportunities for achievement, responsibility, growth and recognition. He wrote that such an environment is likely to turn its "best", most self motivated workers into merely "maintenance seekers". This is a particularly significant problem in paramilitary organisations like police organisations.

As early as 1978, Griffin, Dunbar, and McGill noted that while lack of opportunities for advancement and boredom exerted influence on police job

satisfaction, the very nature of a paramilitary organisation may itself cause dissatisfaction. Specific areas which have been identified as a cause of dissatisfaction among police are: rigid command structures, threatening management style, authoritarian management, strict discipline procedures, inflexibility towards problem solving and lack of support for improvement initiatives (Auten, 1981). The problem is magnified when the percentage of police officers with tertiary qualifications is increased because of the higher expectations of these better educated police (Cipolla, 1996). Trojanowicz and Bucqueroux, (1990) argue that policing organisations must find more diverse ways of maintaining officer's interest and motivation to maintain productivity and retain their services. Cipolla concludes that more research is needed into the area of police job satisfaction with particular interest in the effect of higher education levels on police job satisfaction.

Herzberg (2003) maintained that the most effective way to motivate employees is to enrich the employee's work. This job enrichment he wrote, must be systematic and provide the employee with a genuine opportunity to grow, not merely enlarge some meaningless job (Herzberg, 2003). The process of job enrichment should involve: brainstorming with the employee, removing unnecessary controls, increasing the employee's accountability, giving increased responsibility and recognition and reporting feedback and relevant information directly back to the employees (Herzberg). The effect of this Herzberg argues will be increased motivation and a decrease in absenteeism and staff turnover (2003). Whisenand and Rush (1998) state that police motivation should be studied to; to attract the right employees and keep them, to lead officers to dependably and effectively perform their duties and to lead officers to go beyond routine and

perform self initiated and innovative work. They further argue that it is essential for police managers to understand the individual rewards and values which each employee is seeking from high to low. In a workforce that is becoming increasingly diverse in terms of culture, religion, gender and age managers can no longer make assumptions based on stereotypes.

Managers who are forearmed with knowledge of the sources of employee's motivation in the workplace are far better positioned to determine which incentives and strategies likely to enrich an employee's job (Herzberg, Mausner & Snyderman 1959; Herzberg, 2003). In the light of the documented high rates of police absenteeism, stress and turnover and the lacuna of information in relation to sources of police motivation it is extremely desirable that research identify these sources. There have been many studies of the sources of motivation for various occupational groups but a paucity of research information exists on police (Pollock, Whitbred & Contractor, 2000). Police officers have their own distinct occupational culture: similarities with other occupational groups can not be assumed (Howard, Donofrio & Boles, 2002). It is therefore important that a study be conducted to fill the information gap by describing which factors motivate and de-motivate police in the workplace.

RESEARCH QUESTIONS

This research seeks to answer the question: What motivates police in their work?

Specific targeted questions are:

(1) What do police officers perceive as the sources of motivation in their workplace?

(2) How do perceptions of the sources of motivation vary between different subgroups of police according to?

Years of police experience;

Age;

Tenure;

Rank;

Gender; and

Highest educational attainment.

(3) Do the sources of workplace motivation vary significantly between the generational cohorts?

(4) What are the implications for the QPS

PROBLEM DEFINITION AND CONCEPTUAL MODEL APPLICABLE TO THE QPS.

Herzberg (2003) notes that after 30 years of practising costly psychological approaches and implementing countless human relations training programs, managers still ask: How do you motivate workers? The answer Herzberg provides to this question is for managers to research and discover which workplace factors satisfy or dissatisfy their employees. Managers can then use this knowledge to

create a more “job enriched” satisfying work environment (Herzberg, 2003). The model adapted to identify and explore the factors which motivate police in the QPS is based on Herzberg’s two factor theory.

Herzberg, Mausner and Snyderman’s (1959) two-factor theory is widely applied in work motivational research and management practice and has been the basis for many other models which have been subsequently developed. The theory proposes that two classes of factors influence workplace motivation and that both relate to the person’s needs. The factors which prevent dissatisfaction he called *Hygiene* factors. They stem from the basic drive to survive and avoid pain. These factors are not concerned with pleasure, fulfillment or self-actualising. They include: pay, working conditions, interpersonal relations, supervision and administration. The factors are not motivators but their absence may prevent or inhibit motivation from occurring.

The absence of hygiene factors causes dissatisfaction, but only limited satisfaction when present (Herzberg, Mausner & Snyderman 1959). They tend to be of an extrinsic nature. The factors which energise the person and increase interest and enthusiasm he called *Motivators*. These factors answer those uniquely human needs for achievement and growth (Herzberg, 2003). They include: recognition, intrinsic interest, promotion and status. These factors are seen as determinants of job satisfaction and increased productivity. The motivators therefore produce job satisfaction whilst the presence of hygiene factors merely maintains the status quo and prevents employee dissatisfaction.

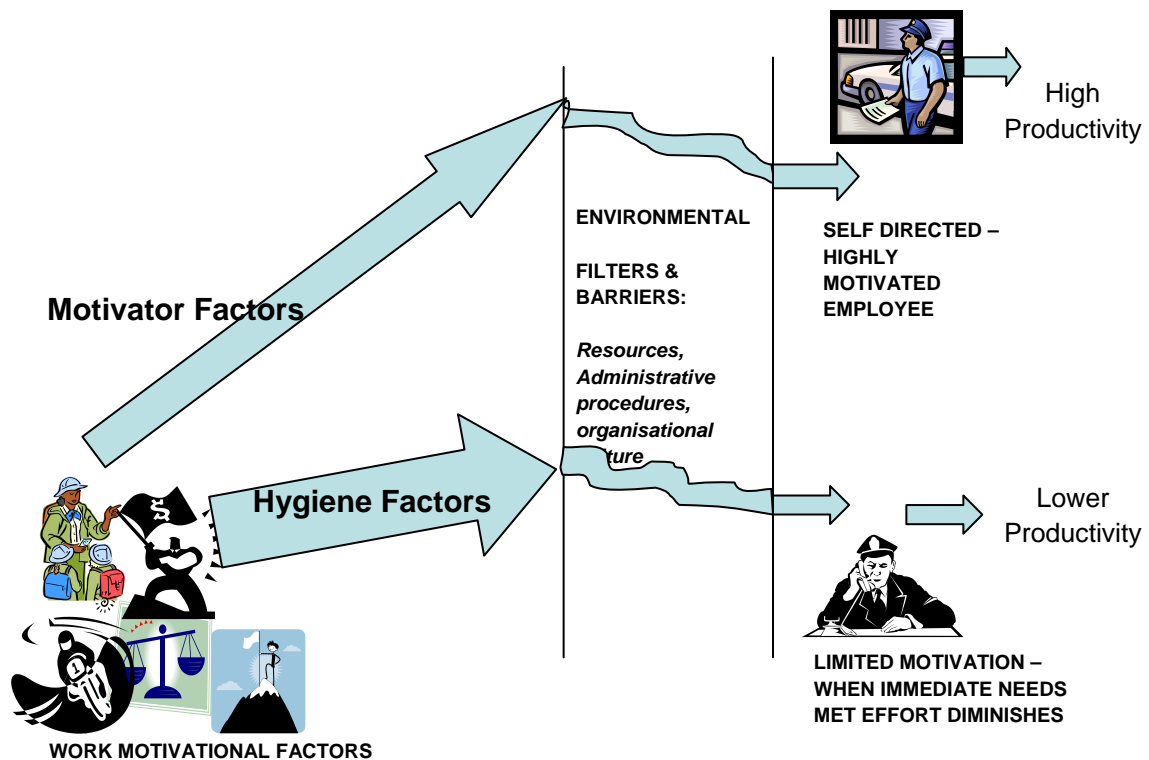
Herzberg, Mausner and Snyderman (1959) claimed that motivator factors are of intrinsic nature while he limits hygiene factors to extrinsic sources.

Herzberg's explanation was a radical departure from the conventional ideas about workplace motivation of the time (Landy, 1989). Whilst Herzberg acknowledged the complexity of human behaviour it was his claim that the absence of one type of factor did not automatically give rise to the presence of the other that departed from conventional thinking of the time (Herzberg et al., 1959).

Herzberg, Mausner and Snyderman's model and research methodology has a number of features which make it a useful model for this research. The model and method in an uncomplicated way identifies and describes the factors that motivate workers in their employment. That is the purpose of this research study.

The writer recognises that both motivator and hygiene factors operate in a police environment and it is necessary for a model and research methodology to include both. An example may be police performing a particular duty because failure to do so could result in discipline action. This is a hygiene factor and the motivation is to avoid the hurt involved with discipline. On the other hand police may apply themselves enthusiastically to the pursuit of a stolen vehicle because of the excitement of the chase and the feeling of accomplishment at apprehending the offender. This is a motivator factor and driven by the officer's need for personal satisfaction through achievement.

Figure 1. Herzberg's model of Workplace Motivation



The diagram above demonstrates how Herzberg, Mausner and Snyderman's (1959) model, applies to the police workplace. It shows that where only hygiene factors are present limited productivity results while when motivators are present an additional higher level of motivation is caused and productivity is largely increased. The arrows represent the specific motivational factors to be identified by this research.

In 1968 Herzberg published an article titled "One More Time: How Do You Motivate Employees?" in the Harvard Business Review. The article was later reprinted in a 2003 edition of the Harvard Business Review. In the article Herzberg's position on motivational factors in the workplace was unchanged but

he did acknowledge that both hygiene factors and motivators can be attributed to a single event. Herzberg cited a then, recent study to defend his conclusions. In the study 81% of factors contributing to job satisfaction were motivators and 69% of the factors contributing to the employee's dissatisfaction over work were hygiene factors (Herzberg, 2003). The 1959 model of Herzberg et al. can be applied to determine the presence and representation of the two factors in the employees. It is not necessary to rely on a nexus between motivator factors and intrinsic sources or hygiene factors and extrinsic sources to utilise the benefit of a direct and practical model that accepts the presence of both types of factors in the workplace without the assumption that they are mutually exclusive. This research has used Herzberg et al.'s sub-factors as a convenient reference point to identify sources of police motivation.

RESEARCH METHODOLOGY

This research used a questionnaire which had been twice previously used to measure the influence of Herzberg, Mausner and Synderman's (1959) sub-factors on police motivation. The first study was a doctoral study of Houston police by Holden in 1980 and the second was a comprehensive study of Taiwanese police by Chiou in 2004. The questionnaire solicits responses to 52 Likert scale comments and to two open-ended quantitative questions. Each of the sub-factors is measured by at least two Likert scale items. In addition the questionnaire collects information on the demographic variables of the respondent. These demographic variables include age, rank, gender, education and years of service. The research was conducted in the Metropolitan North Region of the Queensland Police Service. This region encompasses the north of Brisbane River and adjoins the

North Coast Region in the north and Ipswich in the west. Metropolitan North Region is the single largest region in terms of the number of officers stationed in a region. It also includes almost every type of policing activity performed by Queensland police including Stock Act and Fauna Conservation enforcement. The questionnaire was initially sent by e-mail to every officer in the region and later a follow up paper copy with a return addressed envelope was deposited in each officers correspondence box.

DEFINITION OF TERMS

Herzberg, Mausner and Snyderman (1959) referred to specific factors which he identified as workplace “factors”. He categorised these into two broad groups which he referred to as Hygiene or Motivator “factors”. As a result of this discovery his theory became known as the Two-Factor theory, although Herzberg et al. found sub-factors which were specific sources of motivation in the workplace.

The methodology used to analyse the data in this study used factor analysis as well as other methods. The ambiguous use of the word ‘factor’ could result in confusion, therefore in this study the following terminology is used. For the purpose of this study specific workplace factors which Herzberg found were sources of workplace motivation are referred to as “motivational subfactors” whilst the two broad categories will be referred to as “motivators” and “hygienes”. Where factor analysis is used as a statistical analysis process it will still be described as factor analysis.

OVERVIEW OF STUDY

Chapter 1 provided an introduction to the research background by discussion of the argument that to maintain productivity, modern managers must be skilled in motivating employees. It was argued that the ability to motivate employees requires an understanding of the sources of motivation for the individuals who make up the organisation (Costa, 2003). This knowledge, it was argued is particularly important for police managers who work in an environment that can impact negatively on job-satisfaction and where offices are expected to continue performing to a high standard with minimal supervision. The significance and originality of this study was then explained. The first chapter also introduced the conceptual model for the study which followed Herzberg, Mausner and Synderman's Two-Factor theory of motivation and the sub-factors that made up these two categories. It was explained that Herzberg et al. discovered 14 key sub-factors which are sources of workplace motivation and which he divided into two broad categories of motivators and hygiene.

Chapter 2 provided a review of the literature on this topic including recent research with police. The review examined the history of workplace motivation theories, some key workplace motivation theories, the link between motivation and productivity, motivational strategies and the current debate on a possible nexus between workplace motivation and generational cohort. The chapter concluded that the study of human motivation is still in its infancy and that research adding to

the body of knowledge about motivation and effective motivational strategies is needed by all employers including the QPS.

Chapter 3 described the methodology that was applied to this research. It explained that Herzberg et al.'s two-factor theory is a useful model for identifying sources of workplace motivation and that it has been applied in hundreds of research studies since 1959. The chapter described how the research used an established questionnaire based on Herzberg et al.'s sources of workplace motivation to describe the sources of workplace motivation of police working in the Metropolitan North Region of the QPS. It was explained that the Likert scale questionnaire was sent out via the QPS e-mail system. The chapter explained the data collection process and how the data were analysed. The methods of statistical analysis to yield a descriptive study with descriptive, bivariate and multivariate statistics were also explained.

Chapter 4 explained the structure of the research instrument and how the instrument provided data to answer the research questions. The discussion includes an explanation of the history of the instrument and how it has evolved into the questionnaire used in this study. Other important aspects of the research instrument like validity and reliability are also discussed.

Chapter 5 provided the findings as quantitative and qualitative descriptive data in the light of the conceptual framework for the study. The findings were presented in both table and graph form. The findings included descriptions of the perceived significance of each of the sources of motivation as well as correlations between the variables like motivational sources and demographic characteristics like rank and generational cohort.

Chapter 6 discussed the significance of the findings in respect to the research questions and compares the contrast these findings against the findings of other similar studies.

Chapter Seven drew on these findings to answer the questions posed by this research and offered recommendations on how the QPS could apply the findings in the QPS work environment. It considered the implications of the findings, the limitations of the study and areas for future study highlighted.

CHAPTER 2

LITERATURE REVIEW

Police work behaviour is not an accident, it is caused and the task of the leader is to provide the motivation to cause positive work behaviours. Leaders should reinforce the organisation's goals, be inspirational and lead by example by striving for high quality in work performance (More, Miller, & Wegner, 2003.)

INTRODUCTION

This chapter reviews literature relevant to this study. It examines various definitions of workplace motivation before moving on to the broad issues of the history of motivational theories, the key concepts in theories of workplace motivation and finally narrowing the discussion to recent research of police officer's motivation and job-satisfaction. The literature on different methods that have been applied to research workplace motivation is also discussed. The literature acknowledges the almost universal belief derived from very general anecdotal experience that people in the workplace who are happy are more productive and that it seems motivation to do good work is part of that happiness. As more serious research and empirical analysis of data on workplace motivation has developed the body of literature on the subject has revealed how complex and intricate the issues of workplace motivation are. They involve both identification of factors which are sources of motivation and of those processes that form a nexus between the employee, the motivational source and the workplace environment. Motivation is itself at times difficult to distinguish from job-

satisfaction and job-commitment whilst the motivational processes are inevitably linked to leadership styles. Herzberg himself said that science still cannot explain one percent of human nature (1959). The literature review demonstrates that despite the explosion in research and learning in this area since 1960 and its' increasing importance, a scientific understanding of workplace motivation is still in its infancy.

CONCEPT OF MOTIVATION

Work motivation is closely linked with the related concepts of organisational commitment, job satisfaction and self-efficacy. Researchers have found work motivation difficult to define (Rainey, 1995). Examples of some of the definitions provided in the literature follow.

Higgins, (1994) defined motivation as “an internal drive to answer unsatisfied needs”. While Nahavandi and Malekzadeh (1999) adopted the definition of “a state of mind, desire, energy or interest that translates into action”. This state of mind they believe can be inferred to translate into the action of increased work performance.

In 1988, Whisenand and Rush defined “worker motivation” as

the psychological forces within a person that determine, the direction of the person's behavior in an organisation, a persons level of effort and , a person's level of persistence in the face of obstacles.

Whisenand and Rush (1988) describe motivation as one of the police manager's most important responsibilities. They define motivation as:

“The willingness to do something and is conditioned by an action's ability to satisfy some need for the individual” (Whisenand & Rush, 1988, p. 49). They argue that motivated employees are in a state of tension that remains until relieved when the object of the motivation is achieved. The greater the motivation the greater the degree of tension and the more activity required to relieve it.

Lindner (1998) operationally defined motivation as “the inner force that drives individuals to accomplish personal and organisational goals” while Landy takes a broader view of motivation describing it in terms of a “complex combination of perceptions, aspirations and environmental interactions” (1989, p. 367). Buford, Bedeian and Lindner (1995) take a process approach to motivation and describe it as a predisposition to behave in a purposeful manner to achieve specific, unmet needs. Higgins (1994) takes a similar view and describes motivation as an internal drive to meet an unsatisfied need. It has been defined as a psychological process that gives direction and purpose to a person's behaviour (Kreitner, 1995).

Ambrose and Kulik (1999, p. 231) defined motivation as “the set of internal and external forces that intimate work-related behaviour, and determine its form, direction, intensity and duration”. On the other hand adopting a process approach to motivation, Walker and Symons (1997, p 4) defined motivation as “The conditions and processes that activate, direct and sustain behaviour”. More, Wegener and Miller (2003) described motivation as something that energises a person to take action and which is concerned with the choices the person makes as

part of his or her goal-directed behaviour. A person's motivation to act, they reasoned depends on 2 things: the strength of the need and the person's belief that the action will satisfy the need.

As is apparent from these examples, definitions of motivation often contain reference to: drives, energy, force or action. Herzberg rephrased the question "How do you motivate workers?" to "How do you install a generator in an employee?" The question conveys Herzberg et al.'s concept of intrinsic motivation as an energiser from sources within the individual. This research seeks to identify the factors that drive and motivate police to put energy into their work duties. Therefore in this research Lindner's definition of motivation is adopted.

RELATIONSHIP BETWEEN MOTIVATION, JOB SATISFACTION AND COMMITMENT.

Motivation, job satisfaction and job commitment are all closely related concepts (Herzberg, Mausner & Snyderman 1959; Landy, 1989, Beck, 1999). Nahavandi and Malekzadeh (1999) see motivation as reaching a deeper psychological level than job satisfaction. At this deeper level motivation is associated with the employee's values, personal goals and perceptions of their own deficiencies. This goes beyond job satisfaction which Nahavandi and Malekzadeh describes as an "attitude or feeling" about the job. Distinctions between the two are that motivation is more personal and specific and that motivation tends to be a state of mind shaped by personal factors whilst job

satisfaction is a feeling about something external, “the job”. The different definitions of motivation link motivation to a drive to act which results in work performance. Job satisfaction by itself does not lead to increased action or concentration in all instances (Nahavandi & Malekzadeh). Herzberg (2003) uses the terms motivation and job satisfaction interchangeably and has been criticised for his failure to clearly define these terms (Landy, 1989).

Employee’s commitment is not a single concept but includes beliefs about the job and results from job satisfaction (Cohen, 2000). Job satisfaction indicates what motivates the worker and produces work performance (Whisenand & Rush, 1998). In a 2004 study of 1200 Russian employees, Linz found that worker motivation and organisational commitment were positively correlated. Bragg (2003) made a similar finding in his study of 246 Queensland police. In 1959 when Herzberg, Mausner and Snyderman published their findings the concepts of job-satisfaction and motivation were blurred and he used these terms interchangeably but since then improved understanding of the psychology of work has allowed these terms to be more clearly defined and distinguished. Job-satisfaction is seen as the enjoyment or satisfaction an employee derives from work, whereas job-commitment is a measure of the employee’s dedication and commitment to remain in that job. Employee motivation on the other hand is the energy that drives an employee to do good work.

HISTORY OF WORKPLACE MOTIVATION THEORIES

From as early as the industrial revolution employers sought to increase the motivation of the largely unskilled agrarian workers who came to provide labour in their factories (Wren, 1994). Direct extrinsic incentives like higher pay for increased productivity were offered to workers. Hygiene factors like corporal punishment and fines were also utilised to discourage poor performance (Wren, 1994). By the 1700's serious attempts were made to understand the complexities of workplace motivation. The 1800's witnessed the beginning of profit sharing to encourage motivation (Wren, 1994). Frederick W. Taylor's scientific management theory gained popularity in the late 1800's. It assumed that workers were motivated principally by the prospect of monetary reward (Landy, 1989). Traditionally, police and other law enforcement organisations have retained an authoritarian style of leadership by punishment approach to motivation until recent times (More et al., 2003).

From around 1750 until 1900 the industrial revolution unfolded. During this period management generally adopted a highly centralised, semi-military style with little consideration for the individual differences of workers (Thibault, Lynch, & McBride, 1998). In 1803 Lt. Col. Rowan and Richard Maynes of the Metropolitan Police wrote the first manual of police instruction by adapting text from military manuals (Thibault, et al., 1998). The bureaucratic structures of police services today were modelled on the structures advocated by Taylor and by Weber around 1900. Shortly after this period August: the Police Chief of Orange

County, California began to espouse the benefits of better educated police in terms of greater tolerance and professionalism (Thibault, et al., 1998). Despite this, police forces today are seen as still predominantly managed with a bureaucratic Taylorist style (Beck, 1999; Brunetto & Farr-Wharton, 2003; Denston, 1999; Featherstone, 2008).

In 1927 a series of studies that lasted for 12 years were commenced. They had profound impact on the understanding of work motivation and came to be known as the Hawthorne Studies. The studies illuminated the extent to which workers were affected by factors external to the job and how they organised themselves into informal groups (Blum & Naylor, 1968). The importance of understanding the psychology of workers and the complexity of behavioural variables became apparent through these studies (Blum & Naylor, 1968). In particular the Hawthorne studies demonstrated the importance of worker's perceptions; irrespective of the facts existing at the time (Landy, 1989).

Psychologists in the late 1950s and 1960 began to devote serious investigation to the relationships between job satisfaction, work motivation and job performance. The absence of an accepted framework to guide this research continued to be an impediment for the next two decades. A broad acceptance that a happy worker is a productive worker generally continued without empirical support (Landy, 1989). Expectancy theory then appeared and was the dominant theory for a period. The dominance of expectancy theory was then replaced by the emergence of goal setting theory of work motivation. Goal setting theory has itself given way to theories concentrating on the role of personal efficacy (Landy, 1989).

LINKS BETWEEN MOTIVATION AND PRODUCTIVITY.

Motivated workers are believed to be more productive generally (Herzberg, 2003; Lindner, 1998; Wright, 2001). It is widely accepted that the majority of an organisation's productivity is a result of a motivated minority of employees (the so called 80/20 rule) and for this reason employers search for incentives to motivate the rest (Nicholson, 2003). A strong relationship has been established between work environment, motivation and productivity (Audhesh, Lou & Sheb, 2005; Ference, 2001).

If managers understand their employee's motivation they can use this knowledge to design reward systems (Herzberg, 2003; Lindner, 1998) and motivational strategies to encourage employees to choose to devote more energy to their work (Landy 1989; Hershey 1993). Experimental research has shown that where employee motivation has been improved by a successful job enrichment program, the productivity of the experimental group has increased to clearly outperform the control group and levels of absenteeism fell (Herzberg, 2003).

Motivation has been shown to affect behaviour but if the link between employee's efforts and job performance is weak there will be little if any effect on performance in the workplace (Wiley, 1995). Vroom (1964) holds that there is no direct relationship between job satisfaction and productivity while Herzberg (2003) regards the concepts as closely related and affected by the same or similar factors. The major motivational theories draw a direct nexus between the satisfaction an employee receives from work and the employee's perceived personal motivation (Landy, 1989). Theoretical models have been tested in studies

and found to be good predictors of employee motivation but poor predictors of productivity (Landy, 1989).

It is therefore apparent that motivation drives behaviours that can result in higher productivity in the absence of productivity barriers like, lack of opportunities, poor training, inflexible policies and poor equipment.

Whisenand & Rush (1998) see motivation as only one of the many factors which influence overall job performance by a police officer. Intervening variables like: training, resources, conditions, and the supervisor may inhibit productivity of an otherwise highly motivated and productive individual (Whisenand & Rush, 1998). These resources were identified by Herzberg as sub-factors that mostly fell within the Hygiene factor category such as the sub-factors of salary, conditions and administrative processes.

THEORIES OF MOTIVATION.

This study utilises Herzberg, Mausner and Snyderman's (1959) Two-Factor Theory of workplace motivation. The Two-factor Theory is a popular theory from a school of theories known as the "Needs" Theories. This theory was chosen for its simplicity, practicality and capacity to facilitate the identification of specific sources of motivation in the workplace. 'The theory is founded on 16 motivational sub-factors that provide a sound starting point for identification of police motivation. To explain where the Two-Factor Theory sits in the broad spectrum of workplace motivation theories the 5 major schools of workplace motivation theory will be explained.

Five major schools of motivation theory are: (1) need theory, (2) instrumentality theory, (3) equity theory, (4) reinforcement theory, and (5) goal setting theory. These and other theories of motivation can be classified as either “process” or “content” theory. Process theories tend to explain how motivation is caused, maintained and ceased while content theories attempt to identify the specific factors which initiate, maintain and diminish motivation (Landy, 1989).

NEEDS THEORY: Maslow’s theory of a hierarchy of needs is the most popular in the class of need theories (Landy, 1989). This theory is a broad theory of human development and not limited to workplace motivation. Maslow proposed that all human behaviour is in response to a hierarchy of five categories of needs (Maslow, 1970). In ascending order the classes of needs are: Physiological needs, Safety needs, Love needs, Esteem needs and Self-actualisation needs. The theory proposes that the most basic level of unsatisfied need is the need which is most important at that time to that person. Generally the lowest level of need must be satisfied first before satisfaction of the next level need becomes important. The lowest level, *Physiological needs*, includes basic survival drives like food, water and sleep. The next highest level is *Safety needs*, which refers to a safe environment and includes absence of dangers and threats. The central need class are the *Love needs*, which include interpersonal factors like acceptance by peers. *Esteem needs*, are the next highest category and include one’s position in relation to ability and status. The highest level of needs are the *Self-Actualisation needs* which reflect the realisation of the person’s unique drives and highest potential. This will be different for each person and for one may be religious experience and another artistic expression (Maslow, 1970). Applying

Maslow's theory a homeless person would be insecure and need to satisfy this *safety need* before *Love needs* like acceptance by peers becomes important.

This simple hierarchical model is popular with managers although studies have indicated that need intensity had only weak correlation to need satisfaction. There is no longitudinal support for Maslow's theory and only weak support from cross-sectional research studies (Landy, 1989). Maslow's theory fails to clearly define what he means by needs and although the theory is superficially easy to apply in the workplace there is no clear evidence that its application has led to increased motivation or productivity.

Another needs based theory is that of McClelland (1955) whose theory was based on an individual's need to achieve. The theory incorporated a drive for achievement and a fear of failure. McClelland argued that the environment provided stimuli which by association with previous success or failure had the tendency to motivate or to discourage activity.

Herzberg, Mausner and Snyderman's (1959) two-factor theory is another very popular needs based theory of motivation. In common with all other needs based theories of motivation. Herzberg held that all humans are born with inherent needs which they strive to satisfy throughout life. The theory recognised two basic types of needs; hygiene needs and motivator needs. Hygiene needs are concerned with maintaining the status quo and preventing things from deteriorating. In a work environment they may include: pay, security, co-workers, working conditions and policy. Motivator needs on the other hand relate to the inner characteristics of the individual like need for freedom, challenge and a sense of satisfaction. In the workplace these needs are satisfied by: recognition of

achievement, interesting work and autonomy. Herzberg argued that these two types of need gave rise to two levels of functioning in the workplace.

Herzberg, Mausner and Synderman (1959) considered that workers who are motivated by motivator needs are more productive and preferable to those who are motivated only by hygiene needs. Workers stimulated to satisfy hygiene needs alone, Herzberg et al. believe would only exert enough energy to satisfy the basic needs like maintaining their job security, following enough policy to avoid criticism or keeping their environment safe to a minimum standard and no more. According to Herzberg they required more control and direction than the worker with motivator needs. He suggested that a simple method to encourage hygiene seeking employees to become motivator seeking employees was to practice job enrichment and make their work more interesting (Herzberg et al.). Unlike Maslow's theory Herzberg did not propose a hierarchy of needs and hygiene needs are not presumed to precede motivator needs.

Whisenand and Rush (1998) comment that Herzberg et al.'s model can be applied well in a policing context. Criticism of this theory has come principally from advocates of reinforcement theory because of Herzberg et al.'s claim that behaviour is directed by internal thoughts as well as extrinsic pressures (Landy, 1989). Herzberg et al.'s Two-Factor theory has also been criticised for the ambiguity surrounding basic terms like "extrinsic" and "intrinsic" and a number of subsequent studies have failed to validate the claims of a Intrinsic/Extrinsic dichotomy (Landy, 1989). This later research suggests that the relationship between intrinsic and extrinsic motivational factors is more complex than that proposed by Herzberg, Mausner and Snyderman in 1959.

INSTRUMENTALITY THEORY: Instrumentality theories premise that a person will be motivated to act if he or she believes that the act will be instrumental in delivering some beneficial outcome. The main way in which Instrumentality theories differ from the need theories is their emphasis on cognition. Stress is placed on the cognitive process of deciding whether an activity is justified by the potential results. For example an employee will devote more energy and be more productive if the employee sees that activity as a path to a personal goal of promotion, greater appreciation or more pay. This has the advantage of explaining both positive and negative effects of motivation (Landy, 1989).

Vroom (1964) consolidated many hypotheses on instrumentality into his valence, instrumentality and expectancy (VIE) theory. In 1968, Porter and Lawler, proposed an instrumentality model which rejected the traditional drive approach of the needs theories because of their over reliance on past events and environments. Instead they focused on future events and on the views and traits of individuals. A number of studies of Vroom's model have more accurately predicted employee effort than productivity (Landy, 1989). Instrumentality theory provides a more comprehensive method of understanding the complex industrial motivation of a worker. For instance a promotion may mean loss of income through loss of overtime rights. The instrumentality theories go beyond simplistic assumptions that "happy workers are productive workers".

EQUITY THEORY: Equity is another class of cognitive motivation theory. The theory proposes that when an individual feels that he or she is not valued equally with others or in terms of the person's own perception a psychological

tension is set up. This tension is unpleasant and the person will be driven to take action to remove the tension. An example may be a worker who discovers that she is paid less than a fellow worker for the same output. The worker may then expend less energy and produce less in order to achieve a balance (Landy, 1989). Many situations where workers are motivated can not be explained according to the Equity Theory and research has caused many to question the proportionality assumption on which the theory is constructed (Landy).

REINFORCEMENT THEORIES (BEHAVIOURISM) These theories propose that behaviour is a product of a sequence of: stimulus, response and reward associations. Behaviours resulting from contingent rewards (where a reward is dependent on input effort as with piece rate payment) require higher levels of effort than non-contingent behaviours. An example of this is a sales person who is rewarded by a commission on the volume of sales. The commission is a reward contingent on the behaviour (sales) and once the sales person begins to enjoy the benefits of extra commission she or he will according to the theory strive to maintain that high volume of sales. Contingent relationships where a behaviour will directly effect outcomes and rewards are an important notion in the structure of reinforcement theory. In this example, the greater the value of the sales person's sales: the greater the reward. Mixed results have been achieved with organisational research into reinforcement methods of workplace motivation. In a study by Latham and Dossett (1978) results were dramatically different depending on whether the workers were experienced or inexperienced. Punishment has a place in reinforcement theory and has a very different effect on subjects to exposure to positive reinforcement (Landy). Research with state police officers and nuclear power plant operators who were subject to punishments in the

workplace showed that they were more concerned about avoiding further punishment than with performing their job well or learning. These employees tended to maintain the bad work practices which generated the initial punishment but put more effort into covering them up (Landy).

Like the earlier drive theories, Reinforcement theory attributes all behaviour directly to reactions to the environment. The theory does not recognise cognitive aspects of choosing between alternatives and in fact motivation as a complex cognitive concept does not appear to fit the model. Locke (1980) has pointed to the inability of behaviourists to explain the complexity of human behaviour in the workplace because of the absence of cognitive understanding.

GOAL SETTING THEORY This class of theories proposes that the level of energy a person is prepared to expend is governed by the goals he or she has accepted. Locke and his colleagues reviewed 15 years of research. They concluded that people who set higher goals are prepared to perform to a higher standard to achieve them (Locke, Shaw, Saari & Latham, 1981). This conclusion has been continuously supported by research since (Landy, 1989). Some of this research suggests that goal setting requires the person's participation and acceptance. Self-efficacy is a concept which has grown from goal setting theory and which is gaining increasing interest. Self-efficacy concerns the extent to which an individual's estimate of his or her capacity to achieve results will determine the goals the individual chooses to set himself or herself (Bandura, 1986). This has a direct effect on motivation both in terms of which goals are selected and how much effort and energy is expended in pursuing them. Self-efficacy effects the direction and persistence of a person's behaviours. It is

common human experience that people with self-confidence are more likely to be motivated individuals (Bandura).

Motivation is not static. It changes in response to a worker's employment situation and personal influences (Wiley, 1995). Cultural and social changes also effect motivation. Ownership of a motor vehicle for instance was not regarded as a basic need 50 years ago but today the average worker in the developed world would consider ownership of a motor vehicle in the basic needs category.

Although there is spirited argument between the different schools, some of the theories are compatible. For instance it has been frequently observed that the 3 lower levels of Maslow's hierarchy of needs relate to Herzberg et al.'s Hygiene factors whilst the top 2 levels relate to Motivational factors (Hunt & Hill, 1969; More & Wegner, 1990). Similarly McGregor's (1960) Theory X and Theory Y model can be equated to Herzberg's two factor theory (More & Wegner, 1990). More, Wegner and Miller (2003) link theories from different schools by explaining motivation as a 3 stage process: needs mobilise a police officer's energy, as the need increases in intensity so does the officer's focus on goal attainment and behaviours result which continue until the need is satisfied. Here drive theory, needs theory and goal setting theory all apply as links in the motivational process.

MOTIVATION AND GENERATION

For police managers to attempt to implement effective motivational strategies it is important to understand any difference that may exist between the attitudes and values of the different generational cohorts that make up the diverse workforce. The significance of differences between generational cohorts is a

current topical issue and a plethora of research and other literature on the topic has been published in recent years. Despite the current proliferation of these writings on the implications for managers of differences between generations of workers, it is acknowledged that much more research is needed (Arsenault, 2004). In particular, there is an absence of research literature in this regard on emergency service workers like police (Arsenault, 2004). This research therefore analyses the data on police motivation in the light of possible differences between the generations of the respondents. As such it will provide a valuable insight for managers into the possible differences between different cohorts, if in fact they do exist. In addition to providing valuable knowledge about police that may have specific application to managing motivation within the QPS, this research intends to contribute to the current debate on the general concept of the existence or non-existence of generational cohorts.

Proponents of the concept posit that the workplace has 3 distinct generational groups: Baby Boomers, the X Generation and the Y Generation. Authorities have yet to come to agreement in regards to the precise span of years that each term applies to. Solomon (1992) considers Baby Boomers as persons born from 1945 to 1964 while Jorgensen (2003) places their births from 1946 to 1962 and Appelbaum, Serena and Shapiro (2005) place the births from 1943 to 1960. This ambiguity continues with the other generations. Generation X birth years are described as spanning: 1965 to 1980 (Solomon,), 1963 to 1987 (Jorgensen,) and 1961 to 1981 (Appelbaum et.al, 2005). Generation Y has been described as those persons born: after 1980 (Solomon), between 1978 and 1988 (Jorgensen) and after 1981 (Appelbaum et. al).

For the purpose of this study the mean of these timeframes will be used. They are; Baby Boomers, from 1946 to 1962, Generation X from 1963 to 1983 and Generation Y after 1983. These generations are defined not by equal intervals of time but by significant changes in society, culture and technology which may have impacted on the values and characteristics of persons growing up in the time period.

Baby Boomers were born after the end of World War 2 and at a time where large families were encouraged. There was high employment, high prosperity and the prospect of a stable and bright future. In around 1963 the fertility rates began to fall and increasing numbers of women elected not to remain at home but enter the workforce or pursue study (Appelbaum, Serena & Shapiro, 2005).

Generational cohort advocates point to this period as the genesis of Generation X and which was concurrent with: the rise of feminism, a changing workplace with greater access to information and increased cultural diversity as well as falling employment rates. From 1984 the workplace and the educational system became more global and competitive. This was held to mark the era of the Y Generation and was characterised by dramatic increases in technology and in the availability to that new technology to the community. Western society witnessed a move away from neo-conservatism and the emergence of the popular idea of self from 1984. This idea fueled a new culture of individualism and rejected the notion of citizens of the mass as espoused by Stalin, Hitler, Mao and McCarthy (Brookeman, 1984).

Many writer's argue that the generational groups have distinctly different values and characteristics that require managers to tailor specific policies to these cohorts of workers (Legree, 1997; Sharp, 2002; Tulgan, 1995; Wong, 2000,

Zemke, Raines, Filipczak, 2000; Kogan, 2001). These writers argue that managers should apply leadership styles that maximise productivity for each generational group (Yu & Miller, 2005). It is arguable that the mere mix of workers from Baby Boomers, Generation X and Generation Y in the same workplace has the potential to create disruption with policies that appeal to only one cohort alienating members of other cohorts.

Generally Baby Boomers are held to be materialistic and prepared to sacrifice quality of domestic life for material benefits and security, although research shows they also seek recognition and status (Kogan, 2001). Baby boomers are characterised by: value placed on team work and group discussions, a process oriented view of work, belief that effort precedes achievement, are loyal and committed, acceptance of personal sacrifice to achieve success, long term employment, involvement in elder care and often have older children at home (Jorgensen, 2003). It has been predicted that in the next decade baby boomers will retire taking with them experience and skills which may at best be difficult and timely to replace (Centre for Strategic and International Studies, 2000; Jorgensen, 2005; Karoly & Panis, 2004).

Generation X is held to: value independence, expect open communication, want control over their work, want to understand why things are done, value self improvement of skills, lack long term loyalty to the organisation but are loyal to their profession, want to balance work and life activities, look for an organisation with vision and objectives they can share, are reluctant to take on leadership and see personal goals as more important than work (Tulgan & Martin, 2001). The X Generation is more likely to leave a job for a more challenging or well paid job.

Generation Y has been described as: informed and “media savvy”, with a strong work ethic, entrepreneurial sense, responsible, comfortable with change and more tolerant generally, self confident and optimistic, value skill development and mentoring or coaching opportunities and well educated (Jorgensen, 2003).

Strauss and Howe define a generation as a cohort who was born over a distinct 22 year span and whose values, beliefs and behaviours are fixed by peer personality. This is the premise at the core of the concept of generational cohorts as it proposes that values and beliefs do not substantially change with age but remain with the cohort members as they age. It is therefore important to conduct research to identify the real value for managers of planning human resource motivational strategies with along generational cohort lines.

Other writers argue that there is little empirical proof of significant difference between the cohorts (Appelbaum, Serena & Shapiro, 2005). Jorgensen (2003) and Hull and Read (2003) argue that literature promoting the existence of distinct generational cohorts lacks the necessary rigour. It has been noted that much of the literature promoting the notion of generational cohorts tends to reflect “pop psychology” and often fails to distinguish between an age group and a generational cohort (Jorgensen, 2003).

Research in the Taiwanese manufacturing industry has found that in some contexts generational groups have different characteristics and respond best to different leadership styles (Hui-Chun & Miller, 2005). This research showed some ambiguity on the significance of generational cohorts in the workplace with some predicted responses to leadership and motivation being influenced by generational cohort and others not (Hui-Chun & Miller). The study further underscored the

point that western studies may not be replicated in different cultural contexts and more research on generational difference needs to be undertaken in different cultural environments.

Research in Thailand, of hotel employees, indicated that overall employee job satisfaction is not significantly associated with age but significantly correlates with tenure (Shah, 2003). Over decades the majority of research on the relationship between age and tenure has consistently demonstrated a relationship between age and job-satisfaction (Shah). It has been noted that job satisfaction when graphed against Age is U shaped with the highest levels of satisfaction recorded for young workers and the satisfaction steadily declining as boredom sets in and the novelty wears off until the graph begins to rise again to another high point for the oldest workers (Herzberg, Mausner & Snyderman 1959; Clarke, Oswald & Warr, 1996; Shah).

This rise is seen as a result of older workers becoming comfortable and confident in their role and perhaps enjoying the status of leaders and mentors (Herzberg; Clark *et al.*; Shah). Other reasons given for this rise are the increased tolerance of older workers who have developed good coping strategies (Oshagbemi, 2000) and that with age, intrinsic rewards have become less important in the scheme of their lives (Savery, 1996). This indicates differences associated with age and but not necessarily with generational differences. Ideally the test to determine if these differences are age dependent rather than the attitude of a discrete generational group is to conduct longitudinal studies to determine if this U pattern remains regardless of the aging of the generational groups.

Discussion on generational differences seems based largely on observation rather than empirical work (Jorgensen, 2003). Popular writers promoting ideas of distinct generational cohorts tend to be subjective and rely on single-point-of time date while using retrospective comparisons (Jorgensen).

Appelbaum, Serena and Shapiro (2005) conducted research to challenge Generation X and baby boomer stereotypes in the workplace. The research tested the hypothesis that Generation X is more productive, more motivated, more easily trained and have higher job-satisfaction than the Baby Boomers generation. The research found that Baby Boomers and Generation X were similar and had more similarities than difference.

Niemela-Nyrhinen also conducted research to challenge stereotypes based on generational difference (2007). Neimela-Nyrhinen conducted a mail survey of over 50 year olds to test for anxiety levels connected with SMS and internet usage and had 620 responses. These two criteria tested the stereotype that Baby Boomers are seekers of stability and routine while being non-innovative and tending to resist new technology (Neimela-Nyrhinen). The notion that older people have higher levels of computer anxiety is a common over generalisation (Chua, Chen & Wong, 1999). Numerous studies have shown no relationship between computer anxiety and age (Chua, et al., 1999). Niemela-Nyrhinen's study concluded that Baby Boomers do not fit the traditional stereotype and suggests that perceptions of Baby Boomers are more likely to be a reflection of cultural attitudes than something based on evidence (2007).

When surveyed in regards to their reasons for leaving the Australian Defence Forces members of both X and Y Generations listed lack of job

satisfaction in the top ten reasons whilst Baby Boomers did not. Instead, Baby Boomers on the other hand listed factors such as “too much change” and inability “to live in my own home” (Jorgensen, 2003). In his 2003, study Jorgensen noted that Generations X and Y provided very similar responses and the Baby Boomers also had more similarities with the younger personnel than differences. These results tend to refute the overall notion of distinct different generational cohorts.

Whilst it appears that a definitive answer to this question can only be provided by a longitudinal study or by comparing studies of similar populations separated by a generational time span, the popular literature promoting the concept of generational cohorts seem to be devoid of these valid research methods. Most of the research articles on the topic found by the writer assumes the existence of generational cohorts as a starting point and makes no attempt to distinguish the influence of age alone from the fixed influence of a generational cohort. The key difference between the two is that on the one hand beliefs, behaviours and values may be seen to change with age while on the other it is argued that generational beliefs, behaviours and values are relatively fixed for life. The failure of much of the popular literature to make this distinction reduces the validity of much of the research supporting the concept of generational cohorts.

In a Report to the National Academies, Committee on the Youth Population and Military Recruitment (2002) Sackett describes the popular literature on generational differences as “engaging and entertaining” (2002, p. 1) but went on to describe it as founded on generalisations, untested hypothesis, and popular press casual talk that lacked focus and that can “rarely stand up under careful scrutiny of research” (2002, p.1). Sackett comments that scholarly

literature unlike the popular press does not draw arbitrary distinctions between generational cohorts. He referred to several scholarly studies which dispelled the notion of rigid generational cohorts. In particular he explained a longitudinal study by the University of Chicago that tracked youth attitudes (Backman, Johnston & O'Malley, 2002, in Sackett). The study surveyed youth attitudes and behaviours using a stratified sample of high school seniors which ranged from 14,000 to 19,000 seniors every year for over 25 years. Important findings of this study were that over the 25 year period seniors ranking of life goals was virtually unchanged and that change that did occur in some areas did so slowly. For instance, attitudes about the importance of work to life changed about one half a percent per year.

If distinct generational cohorts do exist then sources of workplace motivation are also likely to vary across different generations of police officers according to the differing values of each cohort. If so, a sound understanding of these differences is essential for drafting of effective future human resource management policies. To do this managers must understand the mind-set of each generational cohort (Kogan, 2001). Findings from this study may assist the QPS to determine the motivational and leadership strategies that are most effective for each generational cohort and to adjust those policies according to the representation of that cohort. Alternatively if the observed difference between groups is a function of age then motivational policies can be implemented to be age specific and have a more permanent place than strategies that will dilute and retire with a particular cohort. As the Australian workforce continues to age and the average lifespan continues to increase workers can expect to retire later in life. This is resulting in an increasingly older and more diverse workforce (Jorgensen,

2003). This study will help determine if there are significant, distinct generational differences among police cohorts with regard to the sources of motivation and if so what those differences are.

MOTIVATING PUBLIC SERVANTS

Some studies suggest that whilst public sector employees value achievement highly, it is more highly prized by private sector employees (Posner & Schmidt, 1996). Other studies however suggest that public sector employees have similar motivational goals to private sector employees (Gabris & Simo, 1995). Even job security was held in similar value by both groups in the study. Gabris and Simo revealed that public sector employees considered that private sector employment provided more challenge, excitement and fulfillment. Research contrasting motivation of public and private sector employees has not yet found conclusive differences (Wright, 2001).

Whilst stringent accountability and discipline codes apply to police they do not apply to the same degree to public servants. It would appear then that police managers have a powerful motivation tool in terms of the broad provisions of the QPS code of conduct which applies to police at all times even when off duty and which are so wide in scope as to encompass any alleged behaviour that may not reflect well on the reputation of the QPS no matter how minor. Discipline provisions for breaches of the code of conduct, breaches of discipline and misconduct are clearly prescribed in the *Police Service Administration (Discipline) Regulation* 1990. These powers still give the QPS no greater ability to use hygiene

factors as a motivation tool as there is no evidence that increased use of these measures will improve productivity. The para-military discipline and control powers of police managers therefore have little application as effective motivators. On the other hand, a perception of excessive and unfair discipline has been linked with reduced motivation and increased resistance to management initiatives by police (Beck, 1999; Eisenberg, Cummings, Armeli & Lynch, 1997). Research has also shown that police and other workers who have been disciplined tend to continue the bad behaviour but spend more time covering it up and no more time or effort in improving their work (Landy, 1989).

In the private sector, redundancy or relocation by management initiated transfers serve as genuine motivators but are not available for public sector managers (Halsey & Osborne 1992). These represent the negative factors which Herzberg classified as “hygiene factors” as opposed to the positive “motivator” factors. He argued that in a modern work environment employers need to focus on motivation through job enrichment programs (Herzberg, 2003). A study of 3,400 Maltese public servants established a clear nexus between management practices and employee motivation levels (Camilleri, 2007).

Although police officers do not fall within the definition of “public service employee” as defined by section 9 of the Queensland *Public Service Act 1996* they share many attributes in common with public servants. Police are generally permanent employees and enjoy a level of security not common in the private sector whilst benefits and rewards are uniformly governed by the Police Service Industrial Award. Police managers then face many of the same limitations experienced by other public sector managers. In Australia, all police employees

from different jurisdictions have shown a positive link between commitment and perceived organisational support, career and employment opportunities, role clarification with individual feedback from supervisors, useful information exchange and a culture of commitment from peers (Beck, 1999).

MOTIVATIONAL STRATEGIES IN THE WORKPLACE.

Different workplace environments have led to a variety of motivational strategies which are available to leaders. In some cases the different theories of motivation are also linked to specific strategies that are applied in an attempt to motivate the workforce. Hershey (1993) comments that more theories of motivation are not needed but instead an insight into the psychology of advertising is required. Hershey argues that the key to persuasion is good communication, which is regular and gives the organisation's strategic view including a strategic view of performance and challenges.

Rector and Kleiner (2002) offer a process for motivating public sector employees. It includes: keeping them informed of organisational plans, individual participation in determining the employees own goals which should link to the organisational goals, formal feedback system which is specific and honest and support for an employee's good work and initiatives. Recent research suggests the public sector employees are more restrained by procedures than private sector employees (Rainey, 1983, 1995).

Nicholson (2003) argues that motivation can not be forced from a person with external pressure and that the best employers can hope to achieve is to create

circumstances which encourage expression of the employee's inherent natural motivation and commitment (Nicholson). What follows from this is Nicholson's notion that manager's need to understand employees as individuals and not as problems whilst placing the responsibility for motivation on the individual employee not the manager. People are naturally motivated; it is just the factors in the workplace or other factors like home stresses which create barriers to the motivation (Nicholson). Nicholson however acknowledges that not all employees can be motivated. Nicholson recommends that managers get to know each employee as an individual and understand their individual needs. He advocates a flexible approach with problem employees, which begins with a planned meeting to discuss openly and honestly the employee's motivation. This should take place on neutral ground and start with an affirmative comment. Nicholson advises that a verbal judo approach be applied to get to the real source of the blockage.

Other writers also emphasised the need to focus on an employee's personal aspirations (Gee & Burke, 2001). An example is illuminated in how the experience of downsizing has harmed relationships between managers and employees (Gee & Burke). These individual differences in personal needs and values are seen as the key to an understanding of motivation of employees in the public sector (Wittmer, 1991). A policy built on the assumption that money and rewards will motivate the workforce fails to focus on the true individual aspirations of the employee and will be likely to be ineffective (Herzberg, 2003). Myers (1964) argues that if a workplace fails to provide a stimulating and personally rewarding environment then even self motivated enthusiastic workers may drop back to the level of mere "maintenance seekers". This supports Herzberg et al.'s contention in regard to the importance of effective job enrichment

programs (Herzberg, 2003). The benefit to the QPS of this research is that the identification of those factors which motivate police will serve as a starting point for the design of effective job enrichment and other motivational programs.

Herzberg acknowledges that the psychology of motivation is a complex subject where the volume of speculation overshadows the volume of knowledge on the subject (Herzberg, 2003). He argued that by appealing to the employee's unsatisfied needs a manager is more likely to influence the employee's motivation. This is an advantage of a needs focused approach to motivation (Wiley, 1995). Research by Kovach (1987) indicates that extrinsic rewards may themselves increase intrinsic motivation, especially if the reward is seen to imply acknowledgement of ability, competence or status (Wiley, 1995). Wiley provides the illustrative example of a pay bonus and rewards where the bonus is an acknowledgement of good work and cites the example of Japan where bonuses account for about 25% of a worker's total pay (1995). Whilst Herzberg, Kovack, Myers (1964) and Wiley all advocate the importance for managers of understanding and utilising the sub-factors that generally motivate their workforces, Nicolson (2003) takes the point a step further and argues that to be effective, managers must appreciate the different sources of motivation for each individual employee and lead through personal influence rather than positional power.

It is difficult to unravel intrinsic from extrinsic sources of motivation. Dawson and Dawson (1990) recognise that the true value of monetary compensation is in the boost to self esteem that accompanies recognition of good work. Given this and Herzberg et al.'s acknowledgement of the complexity of

motivation, together with his own assertion that his research supports the intrinsic/extrinsic dichotomy in only the majority of cases (2003), there is reason to doubt the general validity of this strict intrinsic/extrinsic distinction. It has been suggested that people are likely to attribute positive motivational attributes to their own, intrinsic nature but attribute negative characteristics like poor motivation to extrinsic causes (Landy, 1989). The absence of motivators does not automatically give rise to the presence of hygiene factors causing dissatisfaction. The reverse also applies. Management planners must be aware of causes of dissatisfaction as well as the motivating incentives.

Eisenberg, Cummings, Armeli and Lynch (1997) found that across a wide range of organisations employee perceptions of management support was directly related to positive job conditions experienced by the employees. The researchers identified particular job conditions which employees believed indicated that the organisation supported and valued its employees (Eisenberg, et al.). Employees only attached significance to job conditions that they believed the employer had control over. For instance career and development opportunities were an important factor because employees considered the organisation has control over employee development, training and promotion. Where employees believed the job condition is caused by some factor outside the control of the organisation, there is no expectation that management will or should improve the condition.

Where employees perceived that management has the capacity to improve a particular poor job but does not, poor motivation and low job commitment are the likely results. The job conditions identified and ranked by Eisenberg in order of importance are: time of personal life, opportunity for challenging tasks, training

opportunities, physical working conditions, relationship with supervisor, job security, freedom to adopt own approach to the job, relationship with co-workers, fringe benefits, opportunities to make a contribution to the organisation, opportunity for high earning, recognition of work, work schedule, opportunity for advancement, variety and interest in the work itself, status connected with prestigious work and organisations, opportunity to help others and low stress and pressure. It will be noted how closely these 18 factors parallel Herzberg et al.'s (1959) 13 job motivation sub-factors. Beck's (1999) studies identified these 18 factors as crucial to a police officer's perception of organisational support and subsequent motivation and commitment towards the officer's work.

Kovach (1978) conducted a number of studies which have illuminated the nature of the relationship and importance of different motivational factors. In 1978 he conducted research in the United States with a sample of 3,327 organisations in the solid waste management industry. One manager from each organisation was interviewed and one employee from 30% of the organisations was also interviewed. The purpose of the study was to investigate correlations between an organisation's size and the worker's attachment to the organisation as measured by absenteeism, turnover and overall job satisfaction. Results of the study found that smaller organisations need to build a sense of job security in employees to reduce their high turnover of employees. In larger organisations, turnover was not such a significant problem but the lack of job satisfaction was more likely to result in labour or industrial problems. Kovach's (1978) observations that in an effort to increase productivity by breaking work tasks into small increments employers have robbed employees of the opportunity for job

satisfaction are consistent with Herzberg's view (2003). The study showed a high correlation between low job satisfaction and absenteeism.

In 1987 Kovach researched employee motivational factors by asking industrial employees to rank 10 motivational factors in order of importance. The 3 most popular factors in order of importance were: (a) interesting work, (b) full appreciation for work done and (c) a feeling of being "in on things". An important fact to emerge from his study was that pay which was one of the 10 nominated motivational factors was not chosen by the employees as an important factor.

In 1999 Kovach conducted a study comparing employees ranking of the 10 motivational factors with a ranking of how their bosses thought the employees would rank the factors. Employees were asked what they wanted from their jobs and were given the same list of 10 factors that were used in the 1987 study (Bessell, Dicks, Wysocki & Kepner, 2002). The employees nominated in order as the most important factors: appreciation of work, a feeling of being in on things, job security and good wages. The ordered list of what the employers considered the associates would nominate included as the most popular choices in order: good wages, job security, promotion/growth, good working conditions and interesting work. The study showed that the employers had little understanding of what motivated their employees. An important point made by the study was that, most employees will be motivated by things like praise and appreciation which can be easily provided by employers and at minimal expense (Bessell, et al., 2002). Kovach argued that managers, who understand which factors motivate their employees, are more able to construct a workplace which is likely to foster the employee's own natural motivation and become more productive.

The ranking survey instrument used by Kovach has been used to investigate employee motivations since the early 1940's. In 1946 it was used by the *Labour Relations Institute of New York* to record the factors which motivated industrial employees (Wiley, 1995). When the orders of preferences from different surveys over the past 5 decades are compared it becomes apparent that the order of factors which motivate employees the most differs greatly according to the social and economic influences on the workplace at the time. Comparisons of the results of the studies serve to prove that factors which motivate employees are not static and fixed. The table below compares the factor most frequently identified as the most important with the factor most frequently identified as the least important for each study from 1946 to 1992.

Table 1. Sources of Workplace Motivation

Years	Most Important	Factors	Least Important
1946	Appreciation		Discipline
1980	Interesting work		Discipline
1986	Interesting work		Personal problems
1992	Good wages		Personal problems

From "What motivates employees according to over 40 years of motivation surveys" Wiley, 1995, p. 267.

Wiley argued that the results of the 1946 survey reflected a booming and labour intensive economy at the end of World War 2. Security and pay was not a major concern for workers at that time. The 1970s and 1980s saw an increased focus on people's right to self expression and personal self fulfillment. In this

environment employees identified interesting work as the most important motivator and tactful discipline as the least. Herzberg also stressed the importance of interesting work as an intrinsic motivator (Herzberg, Mausner & Snyderman, 1959). By 1992, workers had experienced the pain of economic recession and company downsizing as global competition policies began to impact on employees lives (Wiley, 1995). Labour cost cutting strategies had left many skeptical in relation to organisational promises and about their own future ability to maintain income and security (Wiley, 1995). As a result, good wages was identified as the most important factor.

Beck's (1999) 5 year study of Australian Police concludes that overall police commitment and motivation is low across all ranks and jurisdictions. One alarming aspect of Beck's study was the finding that more experienced officers reported low levels of commitment. These officers are the role models to whom junior police look for leadership and whose attitudes have a crucial effect on the values and motivation of junior police (Baker, 1995). Of equal concern are the results of an Australia wide study of police by McConkey, Huon and Frank (1996) that showed that when faced with ethical dilemmas, officers with low levels of commitment chose the less ethical solutions. Support of this finding was found by Harr (1997) who found that officers with low levels of commitment to the organisation and high levels of commitment to their colleagues and work teams are more likely to conceal unethical or corrupt behaviour by police.

THE ROLE OF POLICE LEADERS IN MOTIVATING OFFICERS

Police leadership is recognised as a critical management issue (Thibault, Lynch & McBride, 1998). Goldstein (1977) describes the police working environment as volatile as any other part of the globally competitive marketplace. He argues that senior police must possess the same leadership abilities as their private sector counterparts. The ability of the leader to motivate his or her subordinates is an essential leadership attribute (Thibault et al., 1998). A police leader's responsibility is to "unleash and direct" an employee's motivation to reach higher levels of performance (Whisenand & Rush, 1998). Thibault distinguishes leadership from the concept of power because the leader influences the worker whilst the worker still has power to refuse compliance whereas power is applied where the worker has no choice or is under duress. Whisenand and Rush describe police leadership as a process of moving police personnel in a desired direction by cultivating the officer's willingness to move. Bennis and Nanus (1985) defined a leader as:

The person who knows what he or she wants, communicates it to others, positions himself or herself correctly, and then empowers others to perform their duties successfully.

A characteristic of leadership which separates it from mere supervision is the long term nature of leadership and its attribute of soliciting voluntary compliance (Thibault et al., 1998; Whisenand & Rush 1998). In his research on

leadership, Bennis interviewed 90 acknowledged industrial and business leaders. From these interviews he identified 4 key common strategies: a clear vision and projecting it to others, creating meaning through mastery of communication, building trust and faith, and being positive in regard to oneself and others without conceitedness (Bennis & Nanus, 1985). The capacity to motivate others is a key element of all these disciplines of leadership.

More, Wegner & Miller, (2003, p. 142) state that “a well managed police department is easily distinguishable because of its positive leadership”. It is therefore a prime responsibility of modern police leadership to motivate officers through; empowerment, good communication and positive leadership. Some, (Charrier, 2000; More et al.) argue that in most police agencies today, authoritarian managers and supervisors are a thing of the past and have been replaced by leaders who attempt to lead rather than push their subordinate officers. Modern leaders recognise the importance of individual differences, motivating the employee to want to work productively and the dangers of alienation (More et al.). It is generally acknowledged that effective leaders develop a workplace environment which encourages the development of motivated employees (Herzberg, Mausner & Snyderman, 1959; More et al, 2003).

Positive, motivational police leaders are expected to be trustworthy (Porter & Lawler, 2000), convey clear vision and goals (Waitley, 1995) and be positive and inspirational (Baker, 2000). Leaders with these qualities create a stimulating environment for officers to work in. The comparatively recent interest in Total Quality Management has highlighted the critical role that leaders perform in maintaining a positive and responsive work environment. In this regard four

critical tasks that leaders must perform in high-performance organisations have been identified (Harrison, 1996; Lawler, 1986). They are: building trust and openness, presenting a clearly communicated vision, allowing decisions to be made at appropriate levels, and empowering others (More et al.). These observations are also consistent with the comments of Herzberg (2003) and Kovach (1989); that leaders must be experts in motivation.

A survey of American police chiefs in 1976 by the International Association of Police Chiefs identified 14 significant police management skills (Thibault, Lynch & McBride, 1998). Of these 14 skills “motivating personnel” was identified by the police chiefs as the most important (Thibault et al.). Tanenbaum and Schmidt (1975) rejected the traditional 3 leadership styles approach and argued that leadership is situational and is dependent on the situation at the time. They argued that the different functions which police perform require different styles of management and leadership. Examples of this are the different styles of leadership that apply to: taking charge of an emergency situation and when directing day to day routine work. In the former an autocratic hierarchical response may be best whereas the later may best be managed with a democratic participative approach. In line with this the leaders approach to motivational strategies is likely to change according to the nature of the police and the task.

Whisenand and Rush (1998) state that there are three reasons to study police motivation: to attract the right employees and keep them, to lead officers to dependably and effectively perform their duties and to lead officers to go beyond routine and perform self initiated and innovative work. To achieve this in an economic rationalist environment of ever tightening legislative, budgetary and

resource restraints requires leaders to have a sound understanding of the factors which exert motivational influences on police officers and the most effective strategies for applying this knowledge.

RESEARCH IN POLICE LEADERSHIP STYLES

Styles of police leadership were considered because of the direct nexus between leadership management and communication styles and officer motivation levels (Beck, 1999). In 1999, Densten conducted research with a sample of 480 senior Australian police officers to determine the leadership styles used by the police leaders. Densten compared the prevalence of transactional leadership, transformational leadership and laissez-faire leadership styles. In particular Densten sought to compare the leadership styles of senior police against leadership norms for other industries as established by Bass and Avilio (1990). Crank (1998) maintained that police leadership generally is not well developed because the hierarchical nature of law enforcement, police culture and the civil service environment restrict leadership development. Densten noted that the studies of Brown and Campbell (1994), Friedmann (1992), and Tang and Hammontree (1992) all identified that the actions and values of police leaders were expressed in their leadership styles and that these significantly influenced subordinate ranks. Providing leadership to police officers has particular difficulties.

The nature of police work invariably involves a significant percentage of failure. There will always be a significant proportion of offences which are not solved or situations where officers are unable to provide crucial support in time.

Police leaders must possess the capacity to promote a realistic goal of what amounts to success (Delattre, 1996). The three leadership styles examined by Densten (1999) are perhaps the three most commonly recognised leadership styles. Firstly, transactional leaders give clear instructions to control their staff and use rewards and discipline in response to the subordinates' compliance with the direction (Densten). Transactional leaders manage in one of two ways; by contingent reward or management-by-exception. Secondly, laissez-faire leaders are really non-leaders who do not attempt to influence or direct the staff or followers. Thirdly, transformational leaders attempt to raise the awareness and motivation of their staff by appealing to higher values and ideals (Densten). Densten's study found that senior police leaders used management by exception more frequently than the norm across industry. This modus of management was then to exercise control but only do so when something out of the normal occurred. These officers used less contingency rewards and negotiated less than the norm. The study revealed that senior officers did not regard their own leaders as inspirational, motivational or strong role models.

Although the police leaders managed by exception, they were definitely not laissez-faire managers (Densten, 1999). Studies in Canada (Loo, 2004) and New Zealand (Featherstone, 2008) have shown similar low percentages of laissez-faire managers and a high tendency for the transactional management style. This is further support for the belief that the controlling nature of police work tends to produce managers who are transactional and authoritarian. Densten's findings provided some interesting insights into police leadership styles. Because police leaders generally managed-by-exception, transforming organisational culture and providing personal staff development were not high priorities for them.

A criticism made of transactional leadership styles is that employee motivation and other outcomes tend to be short-lived (Densten, 1999). The leaders generally lack the resources to achieve all aspects of the job's requirements yet despite these shortcomings the transactional leadership style delivered a relatively high level of satisfaction with the leader from the sub-ordinates perspective (Densten). Contemporary criticism of law enforcement leaders is associated with excessive reliance on transactional leadership styles and conservative, over cautious and authoritarian attitudes (Densten). Densten argues that transformational leadership styles are more applicable to a changing social environment as they move the focus of employees from their own self interest and encourage higher values and goals. This is seen by Densten as fundamental in regard to changing organisational culture to match public expectations. Excessive application of transactional leadership styles, he argues that results in reduced opportunities for officers to engage in experiential learning as officers will wait for instruction rather than exercise initiative.

In his conclusion to the study Densten (1999) re-iterated that management-by-exception used self interest to motive subordinate officers, and that this limited the senior leader's ability to influence and motivate subordinate officers. He held that senior Australian law enforcement officers were less likely to negotiate with subordinates, role model and motivate or create new understanding and solicit new and creative solutions from subordinates.

More, Wegner & Miller, (2003) argue that police officers are savvy; they quickly realise when motivational speeches lack sincerity and are more about making the supervisor sound impressive. Police work behaviour is not an

accident, it is caused and the task of the leader is to provide the motivation to cause positive work behaviours. Leaders should reinforce the organisation's goals, be inspirational and lead by example by striving for high quality in work performance (More et al.). They must have a genuine concern for the welfare of employees and build networks of trust. In doing so they must embody the opposite of the traditional exploitive management culture that has shaped the negative attitudes of many servicing police officers (More et al.).

RECENT RESEARCH ON POLICE MOTIVATION AND JOB SATISFACTION

A number of recent studies of police have linked workplace conditions and personal factors to job motivation and satisfaction levels. High stress levels have been also been linked to low job satisfaction (Beck, 1999; Martelli, Waters, & Martelli, 1989; Eisenberg et al., 1997; Savery, Soutar & Weaver, 1993). Likewise, poor coping skills have also been linked to poor levels of satisfaction and commitment (Alexander, Walker, Innes & Irving, 1993). In many of these cases stress was the cause of harmful behaviours like increased consumption of alcohol, tobacco and food. High levels of police absenteeism and resignations were also linked to low levels of job satisfaction (Alexander et al., 1993; Koslowsky, 1991; James & Hendry, 1991). Regoli, Crank and Culbertson, (1989) demonstrated the link between high levels of police cynicism and low motivation and job satisfaction levels. Research by Niederhoffer (1967) showed a link between low levels of organisational commitment and cynicism among police

officers. A sense of low organisational commitment has been shown to result in police officer's alienation from the organisation (Hunt & McCadden, 1985).

In 2001, Yvonne Brunetto of Griffith University and Rod Farr-Wharton of Wharton Queensland Manufacturing Institute conducted research into the commitment and satisfaction levels of an Australian Police Service. The study acknowledged that the previous decade of reforms had focused on outputs that coincided with political cost cutting objectives (Kirkpatrick & Lucio, 1995; Avis, 1996, Pollitt & Bouckaert, 1995). The impact of these changes on police officers has been a secondary concern (Metcalf & Dick, 2000). An example is the increased amount of paperwork associated with field activity, which is one aspect of the drive for greater accountability (Brunetto & Farr-Wharton). The private sector has demonstrated far more interest in employee commitment and job satisfaction than had the police service (Pollock et al, 2000). The study reported commitment and satisfaction levels of Australian police at the ranks of sergeant, senior constable and constable. The majority of these subjects had less than 8 years service.

Previous studies of police have shown that there is a significant relationship between reported commitment and job satisfaction levels (Mathieu & Zajac, 1990). Communication has been demonstrated to be an important component in this (Clampitt & Downs, 1993). Mathieu and Zajac's (1990) study demonstrated a positive relationship between low affective organisational commitment and high levels of stress and job turnover. Brunetto and Farr-Wharton's (2001) study reported wide disapproval of the performance appraisal

system. The degree of negativity in regard to the appraisal system increased with increases in rank. This finding was supported by later studies (Bragg, 2003).

Because of the importance of communication between a supervisor and subordinate police officer, both in the context of operational briefings and receiving advice, the study used an instrument that measured job satisfaction associated with workplace modes of communication. Focus groups were also used. Two survey instruments were used and administered to all operational police in one region. A total of 178 useful responses were collected. In addition focus groups were conducted. The results of the study suggest that lower ranking police officers tend to have a high level of commitment to the organisation.

A general positive relationship with the first level supervisor was indicated and findings supported results of previous studies which establish a strong nexus between employee job satisfaction and the provision of information. The study suggested that the communication was less than efficient and the researchers recommended that specific issues be addressed to improve the effectiveness of the system of conveying work communication. Another important finding was dissatisfaction created by the ambiguity police officers face in their daily role. Continuous change management and changing procedures, policies and priorities have created this environment of operational ambiguity and made the need for clear bi-directional communication greater (Brunetto & Farr-Wharton, 2001).

Ankony and Kelley (1999) conducted a study of police officers to test the hypothesis that as an officer's sense of community alienation decreases, the confidence of his or her decision-making and motivation for proactive enforcement decreases. The study also examined the relationship between

perceived alienation - mastery of proactive enforcement and demographic variables like gender and age. The hypothesis is premised on the community policing philosophy; that effective police are problem solvers who are closely aligned with the communities they serve (Goldstein, 1990). The study concerned the sense of alienation which police experience at times of adverse publicity and perceived hostile court decisions. Events like the Rodney King incident and dismissal of charges against O.J. Simpson were examples of this phenomenon.

Community policing requires organisations to flatten their hierarchical pyramid structure of management and devolve decision-making powers to front line officers whilst accepting more community input into police decisions (Ankony & Kelley, 1999). The study surveyed 272 police officers from 11 organisations. Although over 95% were male the sample group covered a range of ages, ranks and education levels. The research used an 18 item questionnaire developed by researchers. Alienation was measured in two ways: firstly officers were asked by three items, what area they would choose to work in if given the choice and secondly they were asked to complete four Likert scale items where they rated the similarity of their own values against the values of community they served. Mastery, the degree to which their work achieved policing objectives, was measured by a further six Likert scale items and the officer's motivation was measured by a further five Likert scale items which rated the degree to which officers were willing to respond proactively to criminal offences committed in the community.

Hierarchical regression was used to test the effect of alienation on mastery. A significant positive relationship between the alienation and mastery scales was

found. This supported the hypothesis. A significant positive relationship was found between age and the level of mastery and between the mastery score and the proactive enforcement scale. Ankony and Kelley (1999) concluded that overall the study supported the hypothesis. The study demonstrated the importance of minimising police alienation from the community. Alienated officers have reduced mastery on the job and lowered motivation levels (Ankony & Kelley). As the sense of alienation increases, morale, motivation and productivity decrease (Ankony & Kelley). Alienation can result in powerlessness, meaninglessness, isolation and self estrangement which reduce the officer's performance (Ankony & Kelley). The researchers emphasised the importance of police leaders providing support and recognition that went beyond the traditional limits of recognising only arrests and crime clear ups (Berg, Gertz & True, 1984).

In 1999 Beck provided a final report on the 5 year research project: *Optimising the organisational commitment of police officers: Background and summary of the research and guidelines for management*, (Australasian Centre for Policing Research. Report Series No. 122.4). Beck explained that research since the early 1950's has shown that police are satisfied with their work and with the people they work with while at the same time they are not satisfied with or committed to the goals and values of the organisations. Beck linked this lack of commitment to behaviours of: absenteeism, turnover, stress, cynicism, alienation and unethical decision making. The study surveyed police from most Australian and New Zealand police organisations. The purpose of the research was to identify why these low levels of commitment exist. The project was divided into 4 studies which progressively added to the final report and guidelines.

The first study was titled, *The development of organisational commitment across the career span of police officers*. The key points concluded from this study were that: commitment decreases with increasing tenure, higher levels of organisational support, confirmed expectations and increased or maintained levels of commitment, and higher levels of commitment were linked to higher levels of confirmed expectations of benefits. Here opportunities to develop skills were found to more strongly link more experienced officers to higher levels of commitment than officers with less than 12 months experience. These findings are consistent with the findings in other domestic and international police studies (Bragg, 2004; Chiou, 2004; Featherstone, 2008; Loo, 2004; Holden, 1980) and it is likely that these same characteristics apply to the profile of current Queensland police.

The second study was titled, *Improving organisational commitment: The police officer's perspective*. The key conclusions of this study were that: officers believe their organisations don't support staff as individuals, officers believe that pay, promotional systems, and management styles are unsatisfactory, officers believe there is a lack of trust, respect and recognition and that the officers would resign if they could find better employment elsewhere. In regard to the last point police identified lack of promotion and dissatisfaction with the work as the reasons they would resign.

The third study was titled, *The development of organizational commitment: Pre-recruitment, training and probation*. The key conclusions from this study were: trainees high levels of commitment declines significantly after 9 weeks in the field, police college training did not come up to expectation, trainee's

commitment is linked to their perception of the significance of the work and to feedback from peers and supervisors. The fourth and final study was entitled: *The development of organisational commitment: The impact of experience of the police organisation.*

The key conclusions from this study were; commitment in a policing career follows a specific developmental trend; problems also exist with the commitment levels of non-sworn employees; for all police high levels of commitment were linked to perceived organisational support, confirmed career and other expectations, role clarity, positive efficiency experiences and good information exchange systems and a belief that high commitment is the norm. To address the issues of poor commitment in the context of the findings of the studies, Beck advocates that her Commitment Intervention Model be used by police managers.

The model is designed to allow managers to address issues of low commitment in individuals who are identified. It is especially important that individuals of senior experience or rank be targeted as their level of commitment sets the standard for less experienced officers (Beck, 1999). The model expresses the key findings from the four studies in the form of a matrix. The particular strategy applied will depend on which of the 4 career stages the identified target occupies. The rows indicate the intervention approaches and the columns identify the relevant career stage. The matrix is displayed on the following page as Table 2.

TABLE 2 Commitment Intervention Model

Career Stage	Pre-entry	Academy	Field Training	Advancement Stabilisation
Critical People	Family Police members -Family and Friends -Recruitment specialists	Trainers Peers	Experienced Officers - Mentors - Partners - Supervisors	Managers Supervisors Co-workers Family
Determinants	Socialisation Recruitment processes	Socialisation Cultural norms	Peer group norms Type of work	Personal positive experiences Shared negative experiences Belief in availability of alternatives
Interventions Aim	(1)“Honest recruitment” (2) Realistic job previews Achieving realism in expectations of recruits	(1) Refocused training (2) Inoculation Preparation for “negative” in the real world	(1) Mentor programs Minimising the negative impact of socialisation by ‘uncommitted’ employees	(1) Modify policies & systems (2) Offer attractive exit options Achieving and maintaining a perception among employees that the organisation is concerned about issues of equity for <u>all</u> employees
Implementation Issues	(a) Collect accurate information -Organisational culture -Job context -Job content Disseminate accurate information	(a) Emphasise - Skills - Knowledge - Police Culture - Ethics	(a) Identify mentor’s role - Support -Challenge -Assessment (b) Select & train mentors (c) Assess & reward mentors (d) Provide feedback mechanism for trainees and mentors	(a) Identify critical ‘support’ experiences (job conditions) - Rewards • Pay • Promotion -Recognition • Participation • Feedback -Working conditions -Career development (b) Modify related policy/ systems -Ensure equity • Procedural • Distributive • Interactional - Communicate ‘control’ issues

Beck concluded her report with the observation that police organisations across Australasia are experiencing significant problems with the motivation

levels, commitment levels and morale of police officers. Officers in all jurisdictions tended to view their organisations as malevolent rather than benevolent. Experienced officers in the studies believed claims by their organisations that “our people are our greatest asset” were mere rhetoric. Officers generally believed that their organisation saw them as costs to be minimised not resources worthy of training and development. None of the organisations adhered to any particular guiding HRM philosophy or theory “beyond motherhood statements”.

Following these statements Beck (1999) concluded that police executives must balance pragmatic management practices with commitment enhancing management practices. Beck recommends that managers use her survey to identify issues which are critical to their employees and then design specific strategies to deal with those issues. This process will also allow the manager to set benchmarks. The reports final comments suggest that utilisation of this intervention strategy will improve performance as well as improve morale, commitment, and satisfaction while reducing stress and burnout. The various writers converge and agree on the need for police managers to understand the workplace factors that lead to job-satisfaction, motivation and job-commitment in order to use human relations management policies in a more positive way to enhance productivity.

In 1980, Holden conducted a doctoral study of motivation among Houston City Police Department patrol officers. Holden developed a questionnaire based on Herzberg’s two-factor theory. One hundred and fifty patrol officers were sampled and the data were analysed in regards to the demographics of the sample.

Significant relationships were found but they were not strong enough to be considered meaningful. The same instrument was used in 2005 by Chiou, Jiunn-cherng to identify job satisfaction/dissatisfaction among Taiwan police. A total of 680 police were interviewed by telephone. This study supported Herzberg, Mausner and Snyderman's two-factor theory. Job satisfaction was found to relate significantly to motivators, hygiene factors and the demographics of age and salary range.

In 2002, Howard, Donofrio and Boles researched the impact of family-work conflict on police work satisfaction. Previous research studies had indicated that work-family conflicts impacted negatively on overall job satisfaction (Howard, et al.). This is an especially significant issue for police because police officer's duties frequently place him or her in positions of direct contact with the public (Howard et al.). The nature of many of these contacts makes the officer more susceptible to the harmful effects of stress which is linked to family-work conflict (Bedeian, Burke & Moffett, 1988). Daily dangerous encounters with aggressive people make the officer's world and workplace very negative and further increase stress levels (Howard, et al.). This type of stress can become extreme in a matter of moments (Howard et al.). In addition to this role conflict caused by an ambivalent public also adds to the officer's level of stress (Howard et al.). The perception that ineffective and lenient courts substantially reduced the worth of an officer's work can also reduce the officer's optimism and motivation to fight crime (Howard et al.).

Research on job satisfaction has increased dramatically but there has still been relatively little empirical study of criminal justice agencies until recently

(Howard, Donofrio & Boles, 2002). This study collected data from a large southeastern state in the United States of America. A total of 119 completed surveys were returned. This was a 74% response rate. The survey took the form of a job description inventory which measured 5 facets of job satisfaction (Howard, et al.). The results showed considerable variance in the different types of satisfaction by work-family conflict as predictors. Howard et al. state that work-family conflict can amount to approximately 28% of the variance for general job satisfaction. This finding supports the hypothesis that when work duties affect an officer's capacity to meet family responsibilities the officer's job satisfaction level is negatively affected and his or her ability to accomplish work related tasks is reduced (Howard et al.).

Howard, Donofrio and Boles (2002) noted that when an officer begins to experience conflict between work and family, satisfaction with the job generally begins to drop and the officer's work will begin to decline. It was suggested that trying to "juggle conflicting responsibilities" reduces the officer's enjoyment of the job as the intrinsic motivators cease to be of importance (Howard et al.). Inherent in the duties of an officer is another fundamental role conflict that adds to an officer's stress. Officers are expected to achieve two conflicting functions: that of crime controller and that of service provider (Howard, Donofrio & Boles).

Most police enter the profession with the intention of seeking satisfaction by fighting crime but find the reality is that most of their energy is spent answering calls for service (Howard, Donofrio & Boles, 2002). This creates workplace dissatisfaction which may be brought home and impact on family conflicts (Howard et al.). Lack of support in the workplace for family conflicts was also

found to be a significant cause of officer stress. Police perceived that many of the demands of the organisations and the demands required for promotion were in conflict with the needs of their families. This contributes to further stress and job dissatisfaction (Howard et al.). Howard et al. concluded that a significant relationship between police family-work conflicts and job satisfaction had been identified and that if police departments are to address the critical issue of high staff turnover they must develop policies and guidelines to minimise work related family conflict. Thibault, Lynch & McBride (1998) also acknowledged the nexus between stress from the officer's family life and work related stress. All of these issues including: family approval, support from supervisors and workload were identified by Mausner and Snyderman (1959) and included in his list of motivational sub-factors.

A doctoral study of Queensland police was completed by Daniel Bragg in 2003. The study, *The Seasons of a Police Officer's Life: An Analysis of the Influence of Career Stage on the Job Satisfaction and Work Commitment of Queensland Police Officers* contributed to the literature on career stage of police officers by testing the utility of the psychological fit model of Super, Crites, Hummel, Moser, Overstreet and Warnath (1957) and the age model of Levinson, Darrow, Klein, Levinson and McKer (1978). A secondary purpose of the study was to explore the influence of other variables on job satisfaction and work commitment.

Bragg (2003) states that a belief that the human factor is the most critical aspect of an organisation's success in the current competitive and volatile global environment has driven research into career stages and the links with employee

attitudes, behaviours and needs. Although a wide range of professional groups have been subject of this type of research, very little research has been conducted into career stages of police officers (Bragg).

The survey sampled 246 officers and collected data on five aspects of job satisfaction, namely: pay, promotion, supervision, co-workers, and work itself, and five aspects of job commitment, namely: organisational commitment, job involvement, protestant work ethic, career commitment and union commitment. MANOVAs and multiple regression analysis were used to determine the relationships between variables. The study failed to support the model proposed by Levinson, Darrow, Overstreet and Warnath (1957) when the model was applied to the job satisfaction and work commitment of Queensland police officers (Bragg). In fact some of the findings in relation to job related attitudes across different age groups directly contradicted some of the assumptions of Levinson et al. (Bragg). There was limited support for the utility of Super et al.'s model when applied to police (Bragg). Organisational commitment, job commitment and career commitment were the main criteria which supported the model of Super et al. The study found that commissioned officers were significantly more satisfied with promotions and that constables had higher levels of organisational commitment than senior constables and sergeants (Bragg). The study also found that female officers expressed significantly higher levels of job satisfaction than male officers and that general duties officers expressed significantly higher levels of satisfaction with promotion than officers from specialist areas (Bragg).

In 2003, Drew, in a doctoral study of turnover by gender and career stage in the QPS, conducted three component studies to which 560, 253 and 996 officers

responded respectively. The first study found that there was no evidence of a significant relationship between gender and turnover. The second study found that the two, person to organisation fit and person to job fit were key predictors of police turnover. Predictably career span which was tenure related was found to impact significantly on turnover. An aspect of QPS turnover was also studied by Marcus (2007) in his doctoral study of the triggers that influenced QPS officers to elect early retirement. Marcus found four factors that contributed significantly to a police officer's decision to retire early. They were: appropriateness, worth and belonging, influences, and relationships and financial issues.

In their classic study, Herzberg, Mausner and Snyderman (1959) found that the sub-factors that give rise to workplace motivation had five distinct effects. One of these was turnover. All four factors identified by Marcus are similar to some of Herzberg et al.'s sub-factors. Similarly, Drew found that tenure as represented by career span was an important predictor of motivation to remain in police employment and correlated with person-job fit. These findings are consistent with findings in earlier research (Holden, 1980; Beck, 1999). Person-job fit itself logically links with Herzberg et al.'s motivational sub-factor, the work itself.

In 2007 the New Zealand Police Force conducted a national police survey to measure levels of police engagement in their work. Of a total sample population of 6,700 officers 4,880 responded to the survey. The results showed that New Zealand police were strongly motivated by a sense of camaraderie and a sense of commitment to victims of crime but were largely disengaged and held little trust in the organisation. The survey showed that police were largely de-

motivated by a lack of recognition and praise from their superiors for work done well and that this general low level of motivation continued to decrease with advancing tenure (Featherstone, 2007). A clear, distinct pattern appears with some consistency across all police these police studies from Holden (1980) to Featherstone (2007). There is a striking similarity in the results of many of these studies despite decades of separation in some cases and differences in culture and continent. The consistent trends are: a high motivation and commitment to colleagues and to victims of crime (Beck, 1999; Bragg, 2003; Featherstone, 2008; Holden, 1980) and a sense of lack of recognition from management as well as a decline in motivation with increasing tenure. Each of these is a serious issue for police management in its own right.

CONCLUSION

The advances of modern science have not identified what constitutes human behaviour and has described at best fragments of human motivation (More, Wegner & Miller, 2003). Researchers generally agree on one thing, the complexity of understanding any aspect of human behaviour (Herzberg, 2003). Every person is an individual and motivation may be stimulated by different factors for each person and may be liable to change from day to day (More et al.). This is important for leaders to understand because the “whole person” is employed not just a part of the officer (More et al.).

It is now universally accepted that the duty of managers is to create an organisational atmosphere where officers become self-motivated. To do this the

leaders must understand the specific drives and sources of motivation for each of their employees (Herzberg, Mausner & Snyderman, 1959; More et al.). The nature of police work includes: sharing of duties and mutual support which creates a unique social bond that is part of the satisfaction that officers derive from their work (More et al.). Supervisors must harness this and other motivational factors to result in officer job satisfaction. Aragon (1993) asserted that when the major motivating influence is an intrinsic drive to achieve, supported by the right organisational environment, morale will be high and this in turn will enhance performance. The duty of police leaders has been described as a duty to evoke “a spirit of performance” (Whisenand & Rush, 1998). Building such a performance culture rests on an understanding of the motivational factors.

The long-term importance of employers understanding what motivates their employees has been recognised throughout history. Motivation has been clearly linked to employee behaviours and in particular in regard to police turnover, absenteeism and work quality (Beck, 1999; Eisenberg, 1997). Cross jurisdictional and transnational studies over almost three decades reveal a consistent police culture of commitment to victims of crime, and de-motivation from a belief in an unsupportive organisation (Beck, 1999; Bragg, 2003; Featherstone, 2008; Holden, 1980; Howard, Donofrio & Boles, 2002). Those studies also show a continuous decline in motivation apparent from the first year of an officer’s service with decreasing motivation with increasing tenure.

In 1990, the QPS was re-engineered with massive restructuring and cultural and management reforms to follow the recommendations of the Fitzgerald Enquiry. This was followed by the compulsory supportive leadership courses for

all QPS managers at every level. The current study will provide information on the impact if any, of these changes, on elements of this police culture that impact on workplace motivation. An understanding of this is necessary for effective management at any level. Modern managers faced with an unpredictable and sometimes volatile global workplace must possess understanding of the factors that motivate the organisation's employees and which strategies most effectively operate on those motivational factors. The QPS is no exception.

The literature highlights the issue of generational cohorts as a potential important consideration for police motivation. Whilst one body of authorities argue that generational cohorts are a significant demographic that exert a powerful influence on workplace motivation (Arsenault, 2004; Zemke, Raines & Filiczak, 2000; Soloman 1992) an opposing group contend that there is no empirical research to supports the existence of discrete generational cohorts with their own fixed values and behaviours (Appelbaume, Serena & Shapiro, 2005; Jorgansen, 2003). Whether in fact generational cohorts exist apart from merely people of different age groups is itself an undecided and topical issue. Clarification of this issue is important for all managers who plan to build a motivated workforce, including police managers. This research intends to contribute to a better understanding of whether generational cohorts do exist and if so, the extent of their influence on police workplace motivation.

Herzberg, Mausner and Snyderman's (1959) Two-Factor Theory is a well tested and useful conceptual model of workplace motivation that has been applied in previous doctoral research of police motivation in Houston (Holden, 1980) and Taiwan (Chiou, 2004). The motivational sub-factors which were identified by

Herzberg et al. form a practical framework against which to measure the motivation of Queensland police. As the purpose of the current research is not to validate Herzberg et al.'s theory but to address the broader question of which factors motivate police, the notion of Hygiene and Motivator factors is not a consideration. The research focus is on identifying the particular sub-factors that exert most influence regardless of which broader category they fall into.

Holden constructed his doctoral questionnaire around these sub-factors. The questionnaire was later used by Chiou in his 2004 study of Taiwan police and is the instrument used in the current research. When the influence of each sub-factor was measured the results were cross tabulated and analysed with respect to the demographics of the respondents to answer the questions posed by this research. The questionnaire asked respondents to answer 54 Likert scale questions and two open-ended qualitative questions. Queensland's largest and most populous geographic police region, Metropolitan North Region was used as the site of the study and an electronic copy of the questionnaire was initially forwarded to every officer in the region by e-mail and later a follow up paper copy with return envelop was deposited in every officers correspondence box.

CHAPTER 3

METHODOLOGY

INTRODUCTION

The intent of this chapter is to explain the methodology used to collect and analyse data to answer the research questions posed in chapter one. Herzberg, Mausner and Snyderman's model (1959) of workplace motivation and the 14 motivational sub-factors identified in his study served as the foundation. Herzberg et al.'s theory has been validated in hundreds of studies conducted since he announced the Two-Factor theory in 1959. A list of some of those studies is contained in Appendix A of this report. The literature has revealed that although Herzberg et al.'s original study was conducted by face to face interviews subsequent research using his theory has used a variety of techniques including questionnaire surveys. As the specific motivational sub-factors have already been identified by Herzberg et al. it was considered that a questionnaire designed around them would be the most efficient method to employ to collect appropriate data.

This study utilised a questionnaire first developed and used in doctoral studies of the Houston police in 1984 and later with Taiwanese police in 2004. The writer has added an additional bank of Likert scale questions and two open ended qualitative questions to the original instrument. The design of the research instrument is explained in detail in Chapter 4.

QUANTITATIVE AND QUALITATIVE RESEARCH

There are two broad methodologies within social research; the quantitative and the qualitative. Quantitative research is concerned with measuring objective facts and is often expressed as statistics while qualitative research attempts to derive cultural meaning and construct social reality (Neuman, 2006). Krathwohl (1993, p. 740) defines qualitative research as: “research that describes phenomena in words instead of numbers or measures” and defines quantitative research as “research that describes phenomena in numbers and measures instead of words”.

Quantitative research focuses on variables and demands reliability while qualitative research focuses on ideas, events and the interactive processes (Neuman, 2006). The emphasis on reliability in quantitative research means that it must remain as value free and independent of the context as possible, usually collect data from a large number of subjects and use statistical analysis while the researcher remains objective and emotionally detached from the research (Neuman, 2006). On the other hand qualitative research is concerned with the authenticity of the data collected (Neuman, 2006). In qualitative research, values are present and only a small number of subjects or cases are usually studied (Neuman, 2006). The analysis analyses the data from the perspective of a theme and the researcher usually is actively involved with the object of research (Neuman, 2006).

Both research methodologies have effectively been applied to research motivation in the workplace in numerous studies (See Appendix A). Neuman (2006, p. 14) comments, that the best research frequently combines the best features of both styles. In this study data were collected on the content aspect of

motivation using an established and previously validated instrument that employed quantitative select answer Likert scale and demographic questionnaires. These questions were followed by two brief questions which gathered qualitative data. The qualitative data were organised into themes that helped answer the main research questions. The advantages of this approach are that the motivational sources (Herzberg's) used as the foundation had already been identified and that the instrument has been previously used and validated. Thus by using an established and previously validated instrument with identified specific motivational sources data collection was possible from a wider sample population than would have been possible if sources had to be identified through analysis of interview records.

OVERVIEW OF METHODOLOGY

A cross-sectional study of police in one region was conducted using an electronic questionnaire and a follow-up paper copy of the questionnaire encouraging those who did not respond to the e-mail survey to return the completed paper copy in the attached envelope. Cross sectional studies like this are not good for measuring change because they take a "snap shot" of one point in time but are useful for representing populations and comparing different groups within a population (Wiersma, 2008). In order to understand which motivational sources motivate police officers at work the study identified the specific sources of job satisfaction

Although the research uses mixed methods the majority of it applied a quantitative methodology to collecting data with a Likert scale questionnaire. The quantitative data collected with this method were analysed to find the key

motivational factors among police officers working in the Metropolitan North Region. Final analysis and comment on this data considered the significance of these finding to the QPS.

SAMPLE SIZE AND SELECTION

The sample for the questionnaire was drawn from 1 of the 8 police geographical regions, Metropolitan North Region. Metropolitan North region is a large region encompassing Brisbane north of the Brisbane River to Petrie and west to Ipswich. The region is staffed principally by operational police whose duties include uniformed and plain clothes functions in urban, city and some country environments. Metropolitan North has a total of 971 police (figures from QPS bulletin board, May 2004). The approximate number of police at the rank stratas in the sample group are displayed Table 3.

TABLE 3 Distribution of ranks in Metropolitan North Region

Year	Commissioned Officers	Sergeants	Senior Constables	Constables	Total number of Police
2005	30	193	292	445	960
2009	35	225	341	533	1134

Metropolitan North Region is a complete self-contained police region. It contains uniformed general duties police, traffic branches, detectives specialising in criminal investigation, undercover police, specialists in working with children,

prosecutors, Intelligence officers, police managers and administrators. It is in effect a microcosm of a typical police organisation. Because this region is representative of the QPS as a whole the findings of this study could be indicative for the whole organisation statewide. Police from Metropolitan North Region perform routine policing functions like patrols, attending Domestic Violence incidents, taking a variety of complaints and requests for assistance as well as traffic duties and various specialist functions. By surveying the whole region the researcher reduced the possibility of distorted data caused by dependence on data from non-representative pockets within the organisation. The questionnaire was distributed by e-mail and then manually dispatched in paper copy to one hundred percent of the sample population in Metropolitan North Region.

The greater the sample size the more closely it will represent the population under study. Neuman (2006) explained that as the size of a surveyed population increases the sampling ratio may be reduced but still provide greater reliability. For example a population of 1,000 may need a sample group of 300 to maintain an accurate representation whilst a population of 10,000 would generally only require a sample group of 1,000 to ensure accuracy (Neuman, 2006). In this case the Metropolitan North Region employs approximately 930 officers. There were 488 responses to the questionnaire. Applying Neuman's criteria this response provides representitvity in excess of the 30 percent level required to accurately represent the entire region.

How well a response represents the sample group is dependent on its size not on its percentage of the whole population (Mouly, 1970). It is therefore posited that the respondent group provides an accurate representative sample of the

population that is free from errors of sampling bias. For a confidence level of 95 percent the response rate of 484 gives a confidence interval of four percent. The response therefore provides a 95 percent assurance that the data collected accurately represents between 91 and 99 percent of the police officers in Metropolitan North Region.

The QPS provided a social research course of study to senior sergeants. The unit of study is a prerequisite for promotion. Approximately 100 senior sergeants per year complete the course. All were required to complete the course within the QPS environment. Police have been inundated with departmental surveys and questionnaires sent by these senior sergeants and others who are conducting research. This has led to a situation where questions may be answered quickly or without due thought. In the writer's experience response rates to educational questionnaires are also generally low within the QPS (around ten percent). The high response to this questionnaire of over 50 percent may suggest that police in Metropolitan North Region regard positive, supportive, police leadership as important and are keen to assist research that better informs police leaders to building a more motivational work environment.

DATA COLLECTION PROCEDURES

A block address of all police within the Metropolitan North Region was prepared by the region's personnel officer and forwarded to the researcher. Questionnaires were then forwarded electronically to the police officers directly by the researcher. This resolved the privacy problem of the researcher needing to

obtain names of employees. This method does not contravene the privacy principles enshrined in State and Commonwealth legislation and policy. The 176 completed electronic questionnaires were returned via the QPS intranet where they were automatically collated as CSV text files at Web Services Section. A user friendly format using radio buttons to denote Likert scores was used. This aided the ease of completion and encouraged an increased response rate. A later follow up paper copy of the questionnaire with return envelop was deposited in every officers correspondence box. The data from responses in paper copy were manually transferred to the SPSS data base and added to the previous 176 email responses. The final total number of useful responses from both electronic responses and hard copy questionnaires on the database was 484.

LIMITATIONS OF THE STUDY

The questionnaire sought personal perspectives on the key factors that operate to motivate police in the workplace. This required subjective analysis on the part of the participant. It relied to some degree on the honesty of the participant's response. It is not considered that the nature of this survey was likely to solicit any biased responses. Participants were not invited to comment on any particular policy or workplace practice. Data collection on sources of police motivation was limited to police in Metropolitan North Region. Any significance of this data for the QPS as a whole is based on the presumption that police in Metropolitan North Region are representative of police throughout the State and

limited by the extent to which the response group was representative of QPS police generally.

Questions are sometimes raised over ethical and validity aspects of insiders researching their own organisations. The main concern is that insiders may approach the research with preconceived values and ideas from their experience with the organisation or its culture and that this could distort data collection and analysis. Where ethnographic research focuses on a racial or religious subject, community suspicion of outsiders has been noted (Minichiello, Aroni, Timewell & Alexander, 1995). On the other hand it is acknowledged that insiders bring special penetrating insights and discernment gained first hand from experience within the organisation (Minichiello et al.). Outsiders are seen by some research populations as academics who lack real understanding of the subject's environment. Some researchers argue that insiders ask more probing questions because of their insights into subject behaviours; insights which outsiders do not possess (Blauner & Wellman, 1973; Zinn, 1979). The police community, generally do not believe outsiders comprehend the demands made on police and so outside researchers are likely to be dismissed as academics lacking the credibility to understand the research topic. The researcher's background as a police officer in this light is an advantage which increased questionnaire response rates and encouraged more in depth comments.

Another possible conceptual limitation was built into the methodology. The conceptual model that underlines this research is Herzberg, Mausner and Snyderman's Two-Factor Theory (1959) and the limited number of sub-factors may build a further limitation into this research. Findings and discussion may

therefore be limited by these factors. Some other factors not identified by Herzberg et al. could possibly be identified from the qualitative data but not be fully explored because of the limitation of a quantitative select answer response questionnaire and the brevity of the qualitative comments.

ETHICAL CONSIDERATIONS

The research conforms to the Australian Association for Research in Education (AARE), code of ethics standards, and is lawful. Every step has been taken to ensure that the research has minimum risk of harming any person and that the prospect of a breach of ethical principles has been minimised. Still it is impossible to foresee every possible occurrence and to fireproof against it. Confidentiality of questionnaire participants is guaranteed by the anonymity of the questionnaire survey process which automatically tabulated result in a way that did not identify individual respondents. The questionnaire does not contain any details which could identify the person providing the response.

An introductory explanation at the beginning of each questionnaire informed the participant of the purpose of the research, how the information will be used and that the decision to participate is entirely voluntary. The introduction explained mechanisms for maintaining participant confidentiality. The process fully informed participants about the nature of the research and how the data were used. The research must be approved through proper procedure by both the supervising education faculty and as well as the subject organisation (Wiersma, 2008). The research must meet the approval of the QPS and the Education Faculty

of the QUT. From the perspective of the QPS there is little risk that this research could cause harm to the organisation or its' members. The converse is true as the proposed research intends to promote better understanding and aid more efficient management of the QPS human resources and planning.

Legitimate research must be morally acceptable (Bibby, 1997). The subject matter of this research and its methodology minimises any prospects of harm resulting to any person. The research methodology and intended use of the findings is open and transparent. The subject questions for this research and the methodology provided valuable data without risking injury or harm to the participants in any way. The dignity of participants was safeguarded by an open and forthright explanation of the purpose of the research and its voluntary nature. This explanation was contained in the e-mail which invited participants to click on the survey link and the paper copies of the questionnaire which were left at each police establishment. A copy of this cover letter is included under Appendix D and Appendix E displays a copy of the cover letter for the paper copy. Appendix F shows the Participant Information Sheet which was also included with each questionnaire and which explained the purpose of the research and the participants right to decline to participate.

These criteria satisfy the AARE requirement that notice be given in writing to participants in regard to the voluntary nature of participation and the purpose of the research (Bibby, 1997). All aspects of the research must be lawful. The unique nature of the police research environment places special limitations and considerations on this research. Usually a social researcher is presumed to hold a duty of confidence towards research subjects or participants. In this case both the

researcher and the research participants are police officers and the *Police Service Administration Act* 1990 imposes a legal obligation on police to report any breaches of discipline or misconduct that are disclosed. It is very unlikely that this would occur because the nature of the questionnaire does not solicit the type of information that would indicate breaches of behaviour and because all responses are anonymous. With these safeguards in place it is considered unlikely that this research could result in any harm to persons or organisations.

METHOD OF ANALYSIS OF QUESTIONNAIRE DATA

The responses to the questions asking participants to provide Likert scores resulted in data that were analysed as interval data whereas responses to the open ended questions were analysed as nominal data. Likert scores are technically qualitative data as the scores are not ratio intervals. In practice however, when each point on the scale has a reasonable number then the averaging effect permits analysts to treat each as interval data. In other words when an acceptable total score is reached Likert scale data were analysed as interval data (Wiersma, 2008).

After three weeks collection, the data from the intranet questionnaire, were manually transferred to excel spreadsheet and then to SPSS. The subsequent data from the hard copy questionnaire were manually typed into the SPSS database. Descriptive comments by participants which reflect attitudes were recorded in a column. These comments were analysed using Herzberg, Mausner and Snyderman's (1959) factors to contrast and compare with the quantitative data. These comments recorded in the last 2 open ended questions were compiled at the

end of the data collection matrix. The resultant information and conclusions from each question were analysed.

Excel spreadsheets and SPSS software were used to tabulate and compile the data as well as produce findings and graphs. Tables and graphs showed distribution of responses and relationships. Tests for reliability, significance and correlation of variance, (MANOVAs and ANOVAs) and multiple regression analysis were applied to measure the significance of relationships between the emergent Prime Motivational Factors according to the demographic variables of age, gender, tenure, education and rank.

OPEN ENDED QUESTIONS

Analysis of comments made in the last two open ended questions applied a discourse analysis approach. In qualitative research, data can become voluminous and researchers should take accounts of their ideas about data as they gather the data and look for key themes as they appear (Bogdan & Biklen, 1992). As responses to these questions were recorded on a format limited to three lines each, the problem of excessive text for analysis was not a concern. The survey was preceded by an initial pilot survey. The pilot survey the face validity of the questions, as well as the time it took for each respondent to complete the questionnaire. Respondents to the pilot survey were also asked to complete and comment on the clarity of language used for the qualitative questions and on any problems or ambiguity they thought could arise in regards to the questions. In

regards to the qualitative questions all respondents to the pilot survey commented that the meaning of the question was clear and that the questions were appropriate.

Initially as the data were sorted, coded and tallied in writing, significant descriptive comments made by participants were highlighted for later quoting in the report. Analysis of the open-ended comments required careful consideration of each comment as one comment may identify a number of motivational factors. Identifying categories involves a combination of direct rational processing as well as intuitive insights by the researcher. The elements of the responses to each question asked in the questionnaire were analysed and sorted into one of the Herzberg, Mausner and Snyderman's (1959) motivational source categories.

This research does not test a hypothesis or assume any particular theory other than Herzberg et al.'s simple finding of 14 motivational sub-factors in the workplace.

CHAPTER 4

RESEARCH INSTRUMENT

INTRODUCTION

This chapter will explain the structure of the research instrument and how the instrument provided data to answer the research questions. The discussion will include an explanation of the history of the instrument and how it has evolved into the questionnaire used in this study. Other important aspects of the research instrument (eg. validity and reliability) will also be discussed.

The instrument used in this study is a questionnaire first developed and used in doctoral studies of the Houston police (Holden, 1980) and later with minor amendments with Taiwanese police in a recent doctoral study (Chiou, 2004). In this study, an additional bank of Likert scale questions and two open ended qualitative questions have been added to original instrument.

QUESTIONNAIRE DESIGN RATIONALE

Herzberg, Mausner and Synderman's (1959) Two-Factor theory has a number of features which makes it a useful model to research sources of police motivation. The model and a subsequent quantitative instrument developed by Holden (1980), identify and describe the sub-factors that are sources of police motivation. That is the key purpose of this research study.

Herzberg, Mausner and Synderman's (1959) model and instrument has been used in many important studies since 1959 and is still frequently used in industrial and academic research. Appendix "D" lists numerous studies which have utilised Herzberg et al's model and instrument. In 1966 Herzberg published an article entitled "One More Time: How Do You Motivate Employees?" (Herzberg, 2003). Herzberg (1968, p. 5) commented on the acceptance and use of his two factor model and research methodology:

At least 16 other investigations, using a wide variety of populations (including some in Communist countries), have since been completed, making the original research one of the most replicated studies in the field of job attitudes.

The method is still popular with researchers. Herzberg, Mausner and Snyderman's instrument and model have been validated many times since 1959 and provide proven reliable methods to identify motivational sources of Queensland police.

Unlike Herzberg, Mausner and Snyderman's original interview format, the questionnaire does not ask respondents to consider a single event and answer questions in regard to that single event. Instead the questionnaire is more general and asks participants to comment on their experiences generally during their careers as police officers. This approach avoids the requirement for participants to comment on a positive and a negative experience which gave rise to some criticism that Herzberg et al.'s hygiene factor/motivator factor dichotomy was a function of the research design (Landy, 1987). Herzberg, Mausner and Snyderman's original research approach could not indicate whether negative or

positive influences were more frequent in the workplace. The current approach endeavours to measure the overall effect of motivating factors on police during their careers and thus gain a more complete understanding.

It is not the purpose of this research to explain the psychological causes of police motivation and de-motivation but to describe the personal factors, environmental factors and management strategies which motivate police. The research does not therefore explore issues such as whether particular identified factors are driven from intrinsic or extrinsic sources. For this purpose then, Herzberg's Two-Factor theory is a proven, forthright, direct and effective model for describing factors which influence motivation in the workplace.

The questionnaire consists of four sections: a demographic section, a section that measures the presence of Herzberg, Mausner and Synderman's (1959) motivational sources in the workplace, a fourth section that asks how strongly each of the motivational sources are as motivators and two final open ended qualitative questions where the participants complete a sentence and where they were invited to provide any further comment. Sections 1 and 2 of the questionnaire used the questionnaire previously validated and utilised by Richard Holden in his Sam Houston University doctoral study of Houston police in 1980 and applied more recently to Taiwan's police in 2004 by Chiou Jiunn-Cherng in his doctoral thesis. Section 3 of the questionnaire consists of a list of 14 questions asking respondents to rank the importance of Herzberg et al.'s 14 factors on a Likert scale of five. These same 14 motivational sub-factors were the dependent variables in Holden's (1980) and Chiou's (2004) studies.

Section 4 contains an open invitation to make any comment and one question asking respondents to complete the sentence “The thing that provides the greatest motivation for me to do a good job is ...” The data from the sentence were analysed to test consistency with the Likert scale results and to provide greater detail about the key motivational factors. A copy of the original interview questions used by Herzberg is attached as Appendix “B” and a copy of the electronic questionnaire used in this study is attached as Appendix “C”.

Traditionally there are two types of questionnaire items, select responses and open-ended responses. Select responses have the advantage of consistency across respondents and data tabulation is quicker and more efficient making them suitable for gathering responses from large numbers of people (Wiersma, 2008). These forced answer questions also have the advantage of providing data that can be used for scaled or categorical responses and be suitable for quantitative analysis assisted by statistical software (Sproull, 1995). Open-ended items on the other hand permit greater freedom of response and allow a more personal perspective to be given (Wiersma, 2008). Where possible this questionnaire has used [select](#) answer responses for efficiency but has used open ended responses where necessary to record respondent’s explanations and examples. For efficiency of tabulation and analysis open ended responses were restricted to three lines.

DEVELOPMENT OF THE QUESTIONNAIRE

The research used a descriptive survey method utilising a Likert scale questionnaire. The questionnaire asked participants to answer 54 Likert score questions about motivational factors in their workplace. Participants rated the importance of Herzberg's work motivational factors for them in terms of a 1 to 5 Likert type scale. The questionnaire used in this study is an adaptation and development of a questionnaire developed by Holden in 1980. In its original format the questionnaire had thirty two Likert scale items. Since then a further twenty-two Likert scale items and two-open ended qualitative questions have been added.

In his classic study Herzberg, Mausner and Snyderman (1959) interviewed respondents face to face and asked each to describe an event that highly motivated them and one that was highly de-motivating. His two-factor theory has been criticised on the basis that it is a natural function or result of the polarised methodology adopted by Herzberg et al. To collect this data by using a quantitative questionnaire about work motivation generally and not one purposefully divided between a good and a bad experience negated this possibility. Also in this research the comments on intrinsic processes are less likely to be inhibited because participants wrote responses anonymously in the questionnaire and not in a face-to-face interview as was the case in Herzberg et al.'s research.

The initial questionnaire was developed by Holden and used in his 1980 research of Houston police officers. The instrument solicited Likert scale responses to thirty-two statements. There were two statements for each sub-factor and two for each of the effects which Herzberg, Mausner and Snyderman's (1959) found resulted from motivation (performance, turnover, mental health, and

personal relations) with the exceptions of the sub-factors advancement and growth. The questionnaire was designed by creating sixty-eight statements based on Herzberg's sub-factors so that there were four statements for each sub-factor. The instrument was then administered to a random group of twenty five Houston police officers.

A selection procedure and a reliability test were then conducted. The selection criteria consisted of a three step process, firstly, selecting and retaining the two statements for each sub-factor. Those statements with means which were significantly higher for the highest group than the mean for the lowest group were selected. This maximised the variance within the study (Holden, 1980). The second selection procedure was to use contingency table analysis to select those statements with the highest correlation (Holden). Holden did not accept any statements with a gamma of less than .5.

The last of the three selection steps was face validity to ensure the statements clearly encapsulated the intended sub-factor. In this way the statements were reduced in number to the best one or two statements for each sub-factor. The overall reliability of the instrument was also tested through an overall reliability index for each two statements that was computed using a contingency table (Holden, 1980). In this case the overall reliability index was .512. The pairs of statements selected in this fashion were then randomly placed into the questionnaire. As the correlation on the reliability index was relatively low a second test of correlation of statements was then carried out on the entire sample. An alternative method of comparison was used in this instance. The scores of one statement in each two statement factor were compared with the scores of the other

sub-factor's two statements. In this instance the gamma was .885. The demographic variables used by Holden were: age, race, sex, years of experience policing, years with this department, level of education, social class of parents, marital status, number of dependents, years of military service and current divisional assignment.

In 2004, Chiou, Jiunn-cherng used Holden's instrument with some minor amendments to survey a sample of 680 Taiwanese police officers. Chiou used descriptive statistics, factor analysis, t-test, One-Way ANOVA and multiple regression to analyse the data (Chiou, 2004). Chiou used the questionnaire to measure the dependent variables of job-satisfaction and job-dissatisfaction through ten statements against the independent variables which were the Herzberg sub-factors expressed in the twenty six sub-factor statements. Both Holden and Chiou were concerned with validating Herzberg, Mausner and Snyderman's (1959) Two-Factor Theory and measuring the nexus between the sub-factors and the effects. This was not the case in the present research which sought identify the factors that motivate police in their work and describe this motivation in terms of internal demographics.

Chiou (2004) added two statements to the categories of advancement and growth to ensure that every sub-factor was examined with two statements. The added statements were lifted from the 1985 thesis of Don Stagg. As Taiwanese police departments are centralized Chiou changed one of the Holden's (1980) salary items "I receive a fair salary compared to officers in other departments" to "I receive a fair salary as compared with officials in other departments". As police are increasingly resigning and moving to other public sector agencies and not just

compare their pay and conditions to other police organisations the writer decided to retain Chiou's version of this salary item. The demographic factors used in Chiou's instrument were gender, geographic location, age, level of education, rank and salary level.

In the current research the writer adopted the questionnaire utilised by Chiou (2004). The demographic variables of geographic location, and salary level were not seen as useful for the present research and were not included. The demographic of tenure was used in Holden's research (1980) and literature suggests it may be a significant independent variable so tenure was added as a demographic item in the current research. Section 1 of the initial questionnaire drafted for this research therefore asked respondents to provide their demographic descriptors: age, tenure in years of service, sex, rank and highest educational achievement.

Section 2 of the instrument asked respondents to respond to statements used in the Chiou's questionnaire (2004). For each of Herzberg, Mausner and Synderman's (1959) sub-factors there were two statements. It was considered desirable to strengthen the questionnaire by increasing the number of statements per sub-factor to three statements. This was done by adding section three to the questionnaire. Good questionnaire design must follow some basic principles. These include, ensuring that every item is directly relevant to the research question; is clear and unambiguous; and does not lead or negatively reflect on the participant's personal professionalism (Wiersma, 2008). The items in this questionnaire follow these guidelines.

In addition the items are all designed to be as brief and direct as possible otherwise respondents will be discouraged from participating and completing the questionnaire. Short three to four page questionnaires are suitable for the general population. Questionnaires longer than this tend to have reduced response rates (Neuman, 2006). Where items require a [select](#) answer response, undesired responses have been avoided by including an “undecided” or “no definite feeling” option to indicate a neutral response (Wiersma). Care has been taken to avoid double negatives and complicated items.

Section 3 added an extra item for each sub-factor by listing each generally as a single word and asking respondents to indicate on a scale of one to five how much that factor motivated him or her. Each item in Section 3 was described by using the language and word or words that Herzberg et al. used to describe that sub-factor. This was done to keep the questions in Section 3 focused on Herzberg et al’s model and reduce any possibility of ambiguity. The list of the items listed in Section 3 are:

A sense of Achievement.

Opportunities for personal growth.

Advancement.

Salary.

Interpersonal relations.

Competent supervision.

Responsibility.

Queensland Police Service administrative policy.

Working conditions.

The work itself.

Personal life (family, community factors).

Status.

Job security.

Recognition.

It was hoped that by reducing the items to brief expressions instead of statements, respondents would be able to complete the questionnaire more quickly and that this in turn would encourage a higher response rate.

At the conclusion to Section 3, three final questions were asked. One Likert scale question in this section asked participants to indicate how motivated they felt generally. This was intended as a measure of current overall motivation, not motivation from any single sub-factor. Two qualitative questions were also asked. They were intended to solicit data to provide deeper insights into the sources of motivation and to assist in understanding and applying the quantitative data. The intention of the qualitative questions was to allow participants to describe their experience in more detail and to open an avenue to introduce new information that may fall outside the parameters of the sub-factors already identified. The qualitative responses were intended to be analysed and compared with the quantitative responses. One of these qualitative questions invited respondents to complete the sentence: "The thing that most motivates me to do good work in my job is ...". The final question asked respondents to make any other comment they wished to offer in relation to things that motivated or demotivated them as police officers. This was the first draft of the questionnaire for the present research. Next it was pilot tested with a group of officers to fine tune it for that Australian environment.

PILOT TEST

In December 2005, copies of the instrument were e-mailed to nine police officers selected from a convenience sample. The officers were from different ranks and spanned Senior Constable to Inspector. The e-mail explained that the instrument was developed for use in a doctoral study of the sources of police motivation and requested the officers to complete the questionnaire, note how long completion took and offer any comment on any ambiguous language or other areas where the instrument could be improved. It was clearly explained that this process was a voluntary one. Six officers responded. The questionnaires took from 20 minutes to seven minutes to complete and averaged 12 minutes.

Three areas were identified where clearer and more culturally appropriate language could be used. One respondent identified that Items 1 and Item 22 used the word “excellent” in a context where the word “good” is less extreme and more likely to solicit a balanced response. A respondent commented that item 33 used the term “self-actualisation” which may confuse some participants. The term was amended to “self fulfillment”. One participant commented that Item 26 should amend the statement from “I am allowed to grow as a person” to; “I am encouraged to grow as a person”. The rationale behind the comment was that even where managers begrudgingly tolerate staff personal growth they still are “allowing” it. Another respondent commented that Item 23 “I look forward to going to work each weekday” ignores that most police work shifts and weekends and implies the survey is directed at office workers. Item 23 was amended to “I look forward to going to work each day”. These recommendations were

incorporated into the instrument. All respondents to the pilot survey commented that the instrument was easy to understand and was quickly completed.

VALIDITY AND RELIABILITY OF THE WRITTEN QUESTIONNAIRE

The validity of an instrument is the extent to which it measures what it was designed to measure (Wiersma, 2008). There are four principal ways to measure validity; face validity, construct validity, content validity and criterion validity. Each of these measures a different aspect of validity.

Face validity is the most basic and requires acceptance by the academic, scientific or other relevant community that the instrument on first appearance is valid (Neumann, 2006). The instrument was accepted for its face validity when used for two previous doctoral studies of police. The face validity of the instrument in the current Australian police environment was tested through a pilot test of the instrument with 9 randomly selected police officers. These officers ranked from Senior Constable to Inspector and spanned different regions and both operational and non-operational offices. A number of minor amendments were recommended. Although some minor changes in language context were recommended, all the officers stated that the questions were clear, unambiguous and were directed to the sources of police motivation in the workplace.

Construct validity considers the instrument from the perspective of the construct or abstract concept that the instrument seeks to measure. The construct is defined by the contemporary thinking and research in the area. This is very

important when the instrument seeks to test hypothetical constructs. When constructs are well-defined the construct validity can be correlated to known instruments based on the same concept. The key concepts in this research are the motivational sub-factors identified by Herzberg, Mausner and Snyderman (1959) in their Two-Factor Theory and the concept of generational cohorts. Both of these constructs are clearly understood in human studies. Herzberg et al.'s sub-factors are the basis of one the classic theories regarding workplace motivation and generational cohort is a concept that is topical and currently frequently the subject of research articles. The two constructs are valid as clearly defined constructs. The research instrument used in this study is designed around the constructs articulated by Herzberg et al. in their classic publication: *The Motivation to Work*, (1959).

Content validity examines the instrument from the perspective of the representativeness of the items in regard to the dependent variables being measured (Wiersma, 2008). This was done in a pilot study of 25 officers when the original instrument was designed by Holden (1980) and factor analysis was used to analyse the 68 design questions for correlates. There were originally four questions for each of et al.'s motivational sources. The two questions in each group which showed greatest correlation were held to more closely represent the same content focus and were retained in the questionnaire. When factor analysis was applied to the questions in Section 2 with one exception the questions for each item showed strong correlation on the correlation matrix. Correlations ranged from the second lowest of .268 to the highest of .827. The single exception was for the item of Responsibility where the two statements of "The department trusts my ability to make decisions" and "I am held accountable for my decisions" had a

correlation score of .041. It is therefore posited that the instrument overall demonstrated strong content validity.

Part 3 of the questionnaire in this a study added a third question for each of these content items. Each of these items asked respondents to rank the effect the item had on their workplace motivation. The wording for each item was lifted directly from the terms used by Herzberg, Mausner and Snyderman (1959) to describe the motivational sub-factors he identified.

Criterion validity validates an instrument by comparison to some criteria external to the test (Wiersma, 2008). An example was the study of Chiou where the results of his study were a set of motivator factors and a set of Hygiene factors as predicted by Herzberg.

The reliability of this instrument was tested in a pilot survey by Holden prior to conducting his doctoral survey and found to have face validity (Holden, 1980). Holden (1980) found that the instrument when used in his doctoral study of Dallas police patrol officers has an overall reliability index of .512. Chiou's 2004 PhD study of Taiwan police used the instrument and found reliability co-efficient of .87 for the instruments questions relating to motivator factors and a reliability co-efficient of .83 for questions pertaining to Hygiene factors.

There were 5 questions in the current research instrument that were negatively worded. The data scale for these questions in SPSS was reversed so that all items were analysed as responses to positive statements. A total of 52 quantitative items in the questionnaire were analysed. The Cronbach's alpha score was .928. This demonstrates a high level of reliability for the instrument and consistency between the items.

ANALYSIS

The variables in this study are Herzberg, Mausner and Snyderman's (1959) job related motivational sub-factors and the demographic characteristics of the sample population. The dependent variables are the measures of sub-factors of workplace motivation experienced by the participants and expressed numerically in response to the questionnaire items. The first section of the questionnaire asked for specific demographic independent variables of: age, tenure, rank, sex and education. The second section asked 36 Likert scale questions which measured how the Herzberg et al. factors in the workplace effected the respondent's motivation. Each of the 13 sub-factors was represented by 2 statements. Eight of these questions also measured the respondent's overall job satisfaction and job dissatisfaction. The next section asked respondents to indicate how strongly each of the Herzberg et al. motivational factors influenced their personal motivation.

A copy of the questionnaire which was electronically distributed and later distributed again in paper copy is included as Appendix C.

SECTION 2 OF THE QUESTIONNAIRE – QUESTIONS FROM HOLDEN'S QUESTIONNAIRE

The statements in section 2 of the questionnaire and motivational sources they relate to are listed below.

Achievement

I feel a sense of accomplishment in doing my job.

I feel that I am important to the QPS.

Recognition

When I perform outstanding work the department recognises it.

I am made to feel that I am an asset to this department.

The Work Itself

I prefer the work I am doing over work in a non-police organisation.

I am doing the kind of work I want to do.

Responsibility

This department thrusts my ability to make decisions.

I am held accountable for my decision.

Advancement

There are many opportunities for advancement in my job.

I have a good chance of being promoted.

Growth

The department's education and training programs have provided me with knowledge to become professional in my field.

I am encouraged to grow as a person in this department.

Department Policy and Administration

I understand the reasons for the department's policies.

I agree with the department's policies.

Supervision

My supervisor is supportive rather than critical.

I like my supervisor.

Interpersonal Relations

I have a good working relationship with other officers.

I am liked by the people I work with.

Working Conditions

The equipment I work with is good.

The working facilities here are excellent.

Status

It is a privilege to be a member of this department.

My family is proud that I am a member of this department.

Security

I am treated fairly when investigated regarding complaints about me.

The department encourages me to stay here until I reach retirement age.

Salary

I receive a fair pay as compared to officials in other departments.

I receive a fair salary here compared to workers in other occupations.

In addition to the statements referring to specific Herzberg, Mausner and Snyderman motivational factors this section included 5 questions which measured aspects of job satisfaction and 5 questions which measured job dissatisfaction. They are:

Job Satisfaction Statements

Generally, I am satisfied with my job.

I like the kind of work I am doing.

I look forward to going to work each day.

I feel that my job is meaningful.

I am encouraged to pursue personal self-fulfillment from my job.

Job Dissatisfaction Statements.

I complain about my job.

I am considering looking for another job outside the department.

I feel embarrassed to talk with others about my job.

I am always exhausted when I go home from my office.

I do not like the atmosphere of my office/station/establishment.

SECTION 3 OF THE QUESTIONNAIRE – DIRECT RESPONSES TO HERZBERG, MAUSNER AND SNYDERMAN’S SUB- FACTORS

Section 3 of the Questionnaire asked respondents to indicate how strongly each of the 14 Herzberg, Mausner and Snyderman (1959) factors motivated them. In this case instead of posing a work related statement the factor was directly identified using the words Herzberg et al. used. This section of the questionnaire instructed participants by stating: “An investigation of the factors which are sources of motivation and de-motivation to you. Please indicate how much each of these factors motivates you.” The purpose of section 2 was to solicit additional data on each of Herzberg et al.’s sub-factors in the workplace to strengthen the overall reliability of the conclusions.

The questions in section 2 repeat the questions used in previous research of Holden (1980) and of Chiou (2004). Those questions asked the respondents to rate how he or she felt about specific aspects of the current work environment whereas section 3 asked the respondent to rate in general terms how strongly each of the motivational sub-factors influenced her or him. The listed motivational sub-factors are:

A sense of Achievement.

Opportunities for personal growth.

Advancement.

Salary.

Interpersonal relations.

Competent supervision.

Responsibility.

Queensland Police Service administrative policy.

Working conditions.

The work itself.

Personal life (family, community factors).

Status.

Job security.

Recognition.

It will be noted that Section 2 has one additional factor “Personal life”.

This was a workplace motivational source identified by Herzberg, Mausner and Synderman (1959) but not included in Holden’s (1980) or Chiou’s (2004) study. It appears that this was because those studies were concerned only with sub-factors originating from the workplace and not from other sources like private life. Even in his original interview study, Herzberg et al. did not consider workplace motivation caused by personal factors which originated outside the workplace even if they impacted on the person’s motivation to work. He limited this category to situations where some event from the workplace had impact on the person’s

personal life and that in turn affected motivation. A transfer to a new work location where an employee was required to relocate his or her family to a new town or city was an example of this (Herzberg et al.). As family and other personal issues have been demonstrated to show increasing influence on workplace motivation and a younger generation demand that work be included in their holistic quality of life (Jorgensen, 2003; Kogan, 2001) the researcher considered it timely to ask for a response in regard to this Herzberg et al. sub-factor.

CHAPTER 5

ANALYSIS & RESULTS

Pleasure in the job puts perfection in the work. - Aristotle

INTRODUCTION

In this chapter the findings describe the Prime Motivational Factors for the police in this study and how the Prime Motivational Factors relate to the demographic variables. The explanation of results is assisted by the use of tables and graphs.

The purpose of this study is to describe the sources of work motivation for Queensland police officers. This has been achieved by using Herzberg, [Mausner and Synderman's](#) (1959) Two-Factor Theory as a conceptual framework for the research.

Results of this study were determined through six stages of analysis of data. Firstly, demographic data were analysed to provide a description of the respondent population by variables of: sex, age, tenure, rank and education level. In the second stage data from all the scale items in the questionnaire were subject to Principal Component Analysis using SPSS 15 and the resultant factors were described in relation to their application to each demographic group. The factors resulting from this analysis are referred to as Prime Motivational Factors. Key

demographic divisions in the research structure were; gender, age (generational cohort), tenure, rank and educational level.

Thirdly, MANOVAs were conducted to explore the significance of variance between each of the Prime Motivational Factors and the independent demographic variables. The MANOVA was used to analyse all the dependant variables (the Prime Motivational Factors) which resulted from the factor analysis against each of the demographic factors. This analysis generated p-values that were useful indicators of the overall significance of the resultant correlation of a Prime Motivational Factor and a demographic factor.

The fourth stage involved the use of one way ANOVAs to explore the impact of demographic variables on each Prime Motivational Factor by comparing sub-groups within each demographic variable. In this way significant variance between subgroups for a demographic like age or education was determined for each of the five Prime Motivational Factors.

The fifth stage used multiple regression to evaluate the extent or effect strength to which each of the demographic variables impacted on the Prime Motivational Factors. Finally, the sixth stage provided qualitative analysis of the qualitative comments made by respondent officers. These comments were analysed, codified and condensed into key categories and then compared with the quantitative results to provide a fuller more descriptive picture.

Demographic data from the first section and data from the second section regarding general levels of motivation were expressed in tables with means and standard deviation columns. The means for the 5 statements for job satisfaction were calculated as were the means for the 5 job dissatisfaction statements. These

were also expressed in the table with columns for mean and standard deviation. Alpha coefficients were calculated to test the internal reliability of each group of factors. The second stage involved bivariate analysis where covariance of variables was compared. This was done with the use of MANOVAs to test overall significance and then one way ANOVAs to measure the variance within key motivational factors.

Stage two used bivariate analysis to examine the relationships between two sets of independent variables. MANOVAs and ANOVAs were applied for bivariate analysis. Initially MANOVAs were used to measure the degree of variance with one independent variable and all independent variables (Pallant, 2005). The level of significance was set at the traditional value of less than .05 or 5 percent. ANOVAs were used where a category of independent variable was present together in two or more groups and a continuous dependent variable was being measured. Because only one independent variable was present this was a one way ANOVA (Pallant, 2005). Multiple regression analysis was finally used to measure the strength of influence of each demographic variable independently on each Prime Motivational Factor.

DESCRIPTIVE STATISTICS

DEMOGRAPHICS

A total of 484 complete responses were received. One hundred and thirty six were from women and 341 were from men as shown below in Table 4. The

responses from the e-mailed questionnaire were collected over a three week period. This resulted in 176 responses. Three months later a hardcopy of the questionnaire with a letter invited anyone who had not already responded, to complete the survey and forward it through dispatch in the attached envelope which was delivered to each officer's correspondence hole in every station and establishment in Metro North Region. This resulted in a further 301 responses which were manually entered onto the data base. When the data were cleansed of incomplete responses and outliers 477 useful responses remained.

Table 4 Frequency of responses for male and female officers

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	341	71.5	71.5	71.5
Female	136	28.5	28.5	100.0
Total	477	100.0	100.0	

Demographics were sought to identify the ranks of responding officers to identify significant correlations between rank and motivation. First year constables are unique in that they are still "trainees" throughout their first year and permanent employment and confirmation of their position is dependent on satisfactory work performance and on satisfactorily completing all requisite competencies in the Diploma in Public Safety (Policing).

Previous studies (Beck, 1999) have shown that across Australian and New Zealand jurisdictions first year constables initially begin service with high levels of

motivation and commitment but experience a culture shock which leads to a rapid plummet in motivation levels during this initial year. Anecdotal evidence suggests that this culture shock is the result of the operational reality of immersion into an environment where the public seems to constantly lie to the officer and express hostility. The alienation effects of this have been documented. If this effect on first year constables is to be reduced then it is important that the precise causes be identified. For this reason it was considered that constables in their first two years service should be identified as a discrete group for analysis separate for other constables. The demographic breakdown of respondents according to rank is shown in Table 5 below.

Table 5 Response population by Rank

Rank	Frequency	Percent	Valid Percent	Cumulative Percent
FYC	34	7.1	7.1	7.1
Constable	154	32.3	32.3	39.4
S/Constable	126	26.4	26.4	65.8
Sergeants	109	22.9	22.9	88.7
S/Sergeants	36	7.5	7.5	96.2
Commissioned	18	3.8	3.8	100.0
Officers				
Total	477	100.0	100.0	

Demographic age groupings were intended to easily translate to groupings of generational cohorts to aid discussion in regards to the significance of any

generational differences. Data from over 55 year olds were collected into a distinct group because police have the option of an early retirement at age 55 and there may be differences in sources of motivation for those who choose to leave at 55 years old and those who remain until compulsory retirement at 60 years of age. An understanding of what motivates those who choose to leave and those who choose to stay may provide some useful insights. The age groups and generational cohorts of respondents to the questionnaire are shown below in Table 6.

Table 6 Response population by Age

Age Groupings	Frequency	Percent	Valid Percent	Cumulative Percent
<25 Gen Y	10	2.1	2.1	2.1
25-33 Gen X	158	33.1	33.1	35.2
34-41 Gen X	155	32.5	32.5	67.7
42-50 B/Boomers	110	23.1	23.1	90.8
51-55 B/Boomers	33	6.9	6.9	97.7
>55 B/Boomers	11	2.3	2.3	100.0
Total	477	100.0	100.0	

The other two demographic variables that were collected on the respondent population were tenure in years of service and highest educational levels achieved. These were data collected in previous studies by Holden (1980) and Chiou (2004) when the instrument was previously used with police and could help yield some valuable understanding about predictors of police workplace motivation and the overall nexus between tenure, education and motivation for police. The data on the respondent population according to Tenure are shown below in Table 7 whilst

the data on the respondent population breakdown according to education are shown in Table 8.

Table 7 Response population by Tenure

Years of police service	Frequency	Percent	Valid Percent	Cumulative Percent
1	39	8.2	8.2	8.2
2	29	6.1	6.1	14.3
3	25	5.2	5.2	19.5
4	33	6.9	6.9	26.4
5	31	6.5	6.5	32.9
6	19	4.0	4.0	36.9
7	26	5.5	5.5	42.3
8	24	5.0	5.0	47.4
9	15	3.1	3.1	50.5
10	16	3.4	3.4	53.9
11	9	1.9	1.9	55.8
12	11	2.3	2.3	58.1
13	6	1.3	1.3	59.3
14	13	2.7	2.7	62.1
15	12	2.5	2.5	64.6
16	17	3.6	3.6	68.1
17	12	2.5	2.5	70.6
18	14	2.9	2.9	73.6
19	7	1.5	1.5	75.1
20	13	2.7	2.7	77.8
21	13	2.7	2.7	80.5
22	10	2.1	2.1	82.6
23	7	1.5	1.5	84.1
24	11	2.3	2.3	86.4
25	7	1.5	1.5	87.8
26	7	1.5	1.5	89.3
27	6	1.3	1.3	90.6
28	4	.8	.8	91.4
29	7	1.5	1.5	92.9
30	7	1.5	1.5	94.3
31	5	1.0	1.0	95.4
32	5	1.0	1.0	96.4
33	6	1.3	1.3	97.7
34	4	.8	.8	98.5
35	1	.2	.2	98.7
36	3	.6	.6	99.4
37	2	.4	.4	99.8
46	1	.2	.2	100.0
Total	477	100.0	100.0	

Table 8 Response population by Education

Highest Educational Achievement	Frequency	Percentage	Valid Percent	Cumulative Percentage
Grade 10	24	5.0	5.0	5.0
Grade 12	77	16.1	16.1	21.2
Trade	27	5.7	5.7	26.8
TAFE Diploma	164	34.4	34.4	61.2
University Under-Graduate	121	25.4	25.4	86.6
University Post-Graduate	64	13.4	13.4	100
	477	100.0	100.0	

OVERALL JOB-SATISFACTION/DISSATISFACTION

Section 2 contained five questions which were indicators of job-satisfaction and five questions which were indicators of job-dissatisfaction. In addition another question asked respondents to describe their overall level of motivation.

Table 9 Job-satisfaction and Job dis-satisfaction levels

Mean of Job-satisfaction statements		Mean of Job-dissatisfaction statements	
Generally satisfied	3.67	Complain about the job	2.8
Like work	3.97	Looking for outside work	2.56
Enjoy going to work	3.43	Embarrassed	2.37

Meaning	3.71	Exhausted	3.01
Self-Fulfilled	2.86	Don't like atmosphere	2.38
Total	2.62		3.53

Self estimate of general motivation level was measured by question 53 which asked officers to indicate how motivated they generally felt to perform good work. On the Likert scale of 1 to 5 these questions scored a mean response of 3.73 as indicated in the table below.

Table 10 General level of workplace motivation

Criteria	Number valid responses	Mean	Standard deviation	Skewness	Kurtosis
General motivation level	476	3.73	.885	-.637	.633

On the Likert scale of five, three was the neutral point of “neither agree or disagree” with the statement. The questionnaire items in regard to job-satisfaction made a positive statement about being satisfied with the job and the items about job-dissatisfaction posed a statement indicating dissatisfaction. Therefore a response greater than three to a job-satisfaction item indicates agreement with the statement and thus job-satisfaction whereas job-dissatisfaction is indicated by a mean response greater than three for those negative statements indicating job-dissatisfaction.

The mean for job-satisfaction was positive for four of the five responses. The one response which was below the neutral point was a mean of 2.86 which was a response to the statement “I am doing the kind of work I want to do”. This appears to indicate that generally police are satisfied with their job. The one area of exception appears to be dissatisfaction with either the kind of work they are required to perform or the kind of work denied them.

Of the five dissatisfaction statements four were clearly below the neutral point and the remaining response was a mean of 3.01: effectively a neutral response. Overall this appears to indicate that police are not dissatisfied with their job. The statement that solicited a neutral response was “I am always exhausted when I go home from my office”.

When asked to describe their general level of motivation at work the mean response on the one to five Likert scale was 3.73. This response also tends to support the inference that police in Metropolitan North Region are generally satisfied with their job.

FACTOR ANALYSIS

All 51 Likert scale items in the questionnaire were analysed to determine factor groupings using SPSS 15. Bartlett’s test for Sphericity provided a significance of .000 and Kaiser-Meyer-Olkin’s measure of Sampling Adequacy was .868. When co-efficient values were set at .3, five components were found with Eigen values greater than one explaining 25.900 percent, 10.169 percent, 5.856 percent, 3.963 percent and 3.433 percent of the variance respectively.

Together these components explained 49.321 percent of the total variance. This was confirmed by the screeplot. Five relatively clean distinct factor groupings emerged. The Component Matrix of components and items that resulted from this Principal Component Analysis are shown in Appendix H.

It was observed that the items in each column reflected distinct themes. The significant items in each column were included in the following new Prime Motivational Factors. Table 11 below shows the arrangement of items into themes in the five columns.

Table 11 Prime Motivational Factors

Column No.	Prime Motivational Factor
Column 1	Feeling Valued
Column 2	Achievement
Column 3	Work Itself
Column 4	Relationships
Column 5	Pay and Conditions

Table 12 shows how the Herzberg et al. sub-factors contributed to the Prime Motivational Factors. The questionnaire contained at least two items for each Herzberg, Mausner and Snyderman (1959) sub-factor as some items most strongly supported different Prime Motivational Factors to other items based on the same Herzberg et al. sub-factor that sub-factor may appear in regard to more than one Prime Motivational Factor.

Table 12 Contribution of Herzberg, Mausner and Synderman's sub-factors to the Prime Motivational Factors

Prime Motivational Factors	Alpha Co-efficient	Key Elements (Sub-factors from questionnaire)
<i>Feeling Valued</i>	.906	Recognition, Responsibility, Advancement, Accomplishment, Personal Growth, Administration and Good Policies, Job Security
<i>Achievement</i>	.846	Achievement, Recognition, Advancement, Status, Job –security, Personal Life, Personal Growth
<i>Work Itself</i>	.782	Work Itself, Status
<i>Relationships</i>	.812	Competent Supervision, Interpersonal Relationships
<i>Pay and Conditions</i>	.750	Working Conditions, Salary

Items in column one tended to follow a theme that reflected feeling valued. The items in this column were; advancement, trust, training, departmental policies, praise for outstanding work, fair treatment regarding complaints, feeling important, promotion, retirement, receiving encouragement, feeling like an asset, agreeing with policies, feeling fulfilled. They add to a general theme for feeling valued by the organisation. These sub-factors were therefore grouped under the Prime Motivational Factor of *Feeling Valued*.

The second column *Achievement*, clearly groups items from part three of the questionnaire together. This was the last part of the questionnaire where

Herzberg's 14 sources of motivation were listed and participants were asked to rate how much that source motivated them in the workplace. It was noted that possibly because these items were single words and not posed as individual statements participants tended to answer each item according to their general **overall** motivation level not specific to that sub-factor. For this reason it was decided to group the item *work* which had a correlation co-efficient of .581 in column two into column three where it has a co-efficient of .378 because this item sat more logically in this column with other items that related to the nature of the work.

Column two *Achievement*, items contribute to the theme of Achievement-Responsibility. The items that made up this factor were: appreciation, achievement, growth, advancement, salary, relations, supervision, responsibility, administration, conditions, personal factors, security and recognition.

Column three items follow the theme of satisfaction from the work itself. These items are: privilege (to be in this department), satisfied (with work), complain (about work), accomplishment (from job), like work, outside (looking for other employment), family (support for work), work itself, embarrass (about job), enjoy (the work), meaning, preferred (this work to other), work and general. Only one item "work" was included in its secondary grouping. This was because work appears in the column two (Achievement) with a value of .581 whereas it sits more logically in column three (Work Itself) where its co-efficient value is .378.

Column four items concern workplace relationships whilst column five items reflect motivation from pay and good equipment. Column four *Relationships* items were relation, support, liked, supervisor and status. Column

five, *Pay and Equipment* items were equipment, fair pay, facilities and fair salary. When a reliability coefficient was run for all items in column one above .3 the result was a Cronbach's alpha coefficient of .902 for column one (Feeling Valued), .905 for column two (Achievement), .742 for column three (Work Itself), .650 for column four (Relationships) and .753 for column five (Pay and Equipment). Four of the five column coefficients satisfy Cronbach's conventional standard for internal reliability. The column four result of .650 is close to the standard of .7 and may be explained by the fact that reliability values are sensitive to the number of items in a scale and when the number of items falls below ten, Cronbach's alpha value usually also falls. In the case of column four there are only five items.

INDEPENDENT VARIABLE GROUPINGS FOR ANALYSIS

In this study, the demographic variables are the independent variables (Age, Tenure in years of service, Sex, Rank and Education Level) while the Herzberg sub-factors and Prime Motivational Factors they produce are the dependent variables (Feeling Valued, Achievement, the Work Itself, Workplace Relationships and Pay and Conditions). Appropriate and reliable application of some statistical analysis techniques like ANOVA and MANOVA may not be achieved where cells contain very different numbers of cases or where in some cases, groups have a very small number of cases (Field, 2005; Pallant, 2005). These statistical techniques generally work best when there is relative equivalence in the number of cases in a cell and the cell with the least number is not less than half the number of the cases in the largest cell. Ideally for MANOVAs and Regression analysis each cell should have more cases than the number of

dependent variables (Pallant, 2005). As sample sizes increase problems associated with normality generally decrease (Tabachnick & Fidell, 2001). Each cell should have at least a minimum of 20 cases to ensure robustness of normality (Pallant, 2005). Some of the initial data in regard to the demographics of the respondent population did not meet this requirement in its initial form.

Demographic data for tenure for instance consisted of a continuous variable of thirty eight categories ranging from one years service to forty six years service. Some of these categories had only one case. To permit statistical analysis tenure was divided into seven categories as show in Table 13 below. These new seven categories permitted the closest possible number of cases in each cell whilst still keeping the minimum above 50 and the maximum number less than twice the number in the cell with the least cases. This grouping structure permitted statistical analysis by MANOVA to be conducted.

Table 13 Tenure Grouping for Analysis

Group Number	Tenure in years	N
1	<=2	69
2	3-5	89
3	6-8	66
4	9-13	68
5	14-18	62

6	19-24	57
7	25+	56
	Total	467

This grouping shown in Table 13 allowed ANOVA, MANOVA and Linear Regression techniques to be utilised with respect to Tenure. When the Prime Motivational Factors were tested for tenure as years of service using these groupings for homogeneity of variance none violated the assumption of homogeneity. Levene's Test was not significant for Feeling Valued ($p = .032$), Achievement ($p = .167$), Work Itself ($p = .450$) and Pay and Conditions ($p = .90$). The Prime Motivational Factor of Relationships initially produced a Levene's result of significance at .018. Levene's test is not as robust as some and where samples sizes are large Levene's test may show significance where there is in fact no violation of the assumption (Pallant, 2005). Tabachnick and Fidell (2001) advise that alpha levels should not be too conservative and suggest setting the levels of significance at .025 or .01. The histogram for population Tenure was symmetrical and approached the normal. This indicates that the assumptions in regards to normality were not violated.

Data on the impact of age on motivation are essential to address the question of the effect of generational cohort on workplace motivation. This is why the questionnaire was designed to collect data on the respondent's ages according to generational cohort. The collection design however has created some problems for analysis. Statistical analysis like MANOVA and ANOVA are most robust and reliable when the number of cases in any one cell is not too low and where the

proportion of cases in different cells does not differ by more than three multiples (Pallant, 2005). In this case the initial categories differed from a response frequency number of 10 for Generation Y to 158 for the younger Generation X in the 25-33 year old category. The writer regards the number of 10 cases in a category as too small and the disparity of number of cases within cells as too large for reliable analysis. The groupings for age were therefore reorganised into three broad groups of roughly equal frequency of response. Generation Y were not considered and the other five initial categories were collapsed into the three categories to form new groups as shown below in Table 14.

Table 14 Age Grouping for Analysis

Group Number	Age Span Years	Generational Cohort	N
1	25-33	Young X	158
2	34-41	Older X	156
3	42-60	Baby Boomers	151
	Total		473

When a simple histogram was produced for Age it was it was symmetrical indicating a normal distribution.

Education presented a similar problem. Although categorical the different categories of grade 10, grade 12, college Diploma, undergraduate university and post-graduate university are clearly progressive and generally separated by two or

three year intervals of study. For this reason the data in respect to education were also analysed as a continuous variable. Again the initial responses in each category were not uniform and ranged from 24 respondents who had a highest educational attainment of grade 10 to 164 who had attained a TAFE diploma. It was decided to remove grade 10 level from the scale and combine the respondents in the categories of grade 12 and trade completions. This was because university entrance generally equates completion of a trade apprenticeship with equivalence to Grade 12. The education groupings for analysis are shown below. This still left significant disparity between the cell sizes for TAFE Diploma with 160 cases and University Post-graduates with 64 cases. The disproportion was reduced by randomly selecting and removing 24 cases from the TAFE Diploma cell and randomly selecting and duplicating 24 cases from within the Post-graduate cell. This brought the ratio of the diploma cell to Post-graduate cell to 136:88 and within no more than 2:1 rule. The final Scale of Educational Groups before removal of outliers is shown below in Table 15.

Table 15 Educational Grouping for Analysis

Group Number	Educational Achievement	N
1	Grade 12/Trade	125
2	TAFE Diploma	136
3	Uni Under-Grad.	118

4	Uni Post-Grad	88
	Total	467

The demographic data for rank consisted initially of six groups for each of the categorical variables of: First Year Constable, Constable, Senior Constable, Sergeant, Senior Sergeant and Commissioned Officers. The data that fell into these groups also reflected the same problems of disproportionate cell numbers as other demographic variables. There was a wide variation in the number of cases in different cells. This ranged from 18 responses in the Commissioned Officers Group, in Group 6 to 154 responses from Senior Constables in Group 3. The disparity of number of responses in these cells could mitigate the reliability of statistics generated from these unequal comparisons. To permit statistical analysis Rank was divided into five categories to reduce the range of number of cases within the cells. The 34 First Year Constables were added to the other 154 Constables to form a group of 188 cases. This is now Group 1 and represents all Constables. Group 1 was further reduced by selecting every sixth First Year Constable and every sixth other Constable and removing the case from the scale until 34 cases in that category had been removed. The result was a new Group 1 with a total of 154 cases. There were still 126 Senior Constables in what is now Group 2 and 126 Sergeants in what is now Group 3. The Senior Sergeants and Commissioned Officers were rolled together into a new Group 4 which has a total of 54 cases. From this new Group 4 a further 34 cases were randomly selected, duplicated, and added to the group to bring the total number of cases in Group 4 for Senior Officers to 88. This process reduced the range of cases in each cell

from a maximum of 154 for Senior Constables to a minimum of 88 for Senior Officers whilst still maintaining the same total number of cases overall. Again this brought the ratio of the cell sizes within the 2:1 rule. The new Rank groupings are significantly closer in frequency than previously and are shown below as before removal of outliers.

Table 16 Rank Grouping for Analysis

Group Number	Rank	N
1	Constables	154
2	Senior Constables	126
4	Sergeants	109
5	Senior Officers	88
	Total	477

NORMALITY ASSESSMENT OF THE FIVE MOTIVATIONAL FACTORS.

Many statistical techniques are based on the assumption that the dependent variables have a “normal”, bell curve distribution (Pallant, 2005). SPSS statistical software was used to explore this normality using Kolmogorov-Smirnov and Shirpiro-Wilk test of normality as well as histograms, and Q-Q plots. The Kolmogorov-Smirnov and Shirpiro-Wilk tests showed significance levels greater than .05 for the Prime Motivational Factors, *Feeling Valued* and *Achievement*. This indicates that for the Prime Motivational Factors *Feeling Valued* and

Achievement the score do not significantly depart from the normal distribution. It is common for the assumption of normality to appear to be violated when these tests are applied to larger samples (Pallant, 2005). This required the other Prime Motivational Factors; *Work Itself*, *Workplace Relationships* and *Pay and Conditions*, to be explored with Q-Q plots and histograms. When the other factors were examined with Q-Q plots in each case the plot followed a straight line with a small but acceptable deviance from the line. There was no clustering of points. The reasonably straight lines indicated that the scores were normally distributed (Pallant, 2005). The histograms were all highly symmetrical and approached normality. This supports the inference that all the Prime Motivational Factors have normal distribution scores and are suitable for further statistical analysis. Histograms and Q-Q plots for each of the Prime Motivational Factors follow.

Figure 2 Histogram of Motivation from *Feeling Valued*

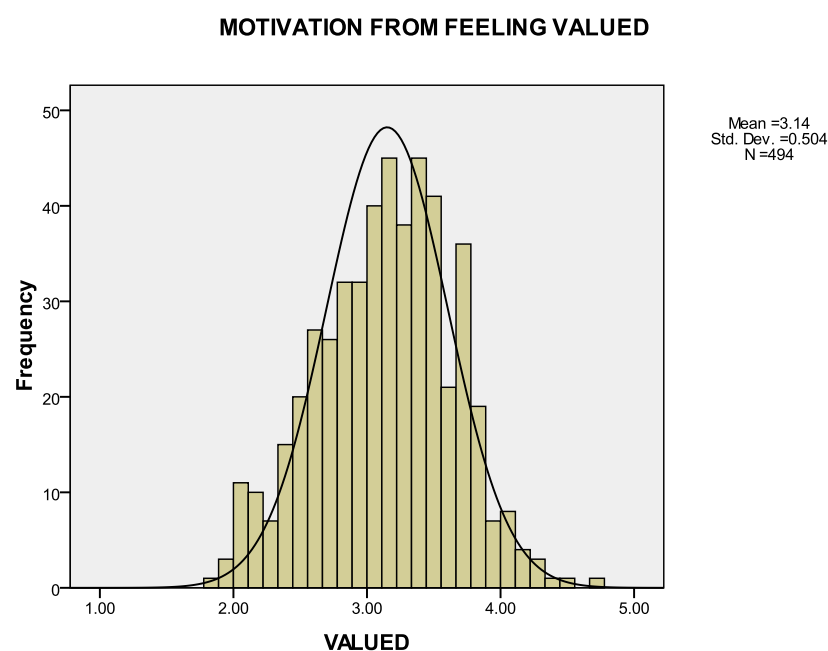


Figure 3 Q-Q Plot of distribution of scores for *Feeling Valued*

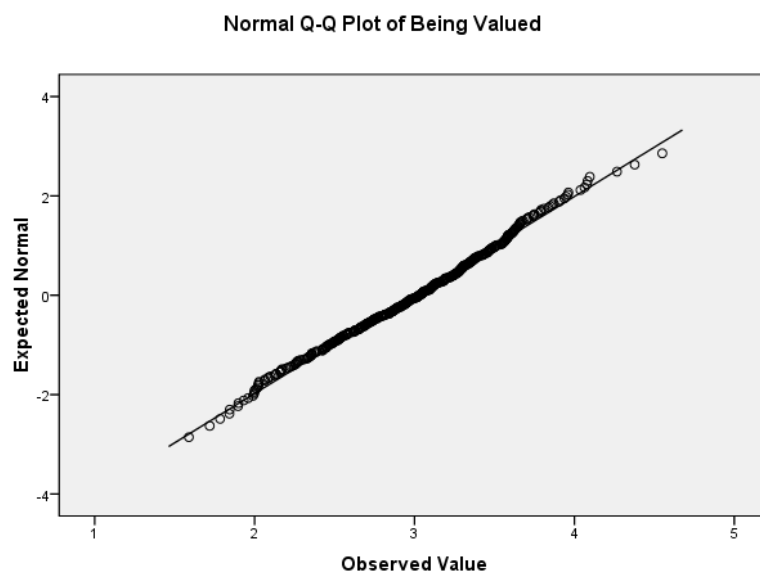


Figure 4 Histogram of Motivation from *Achievement*

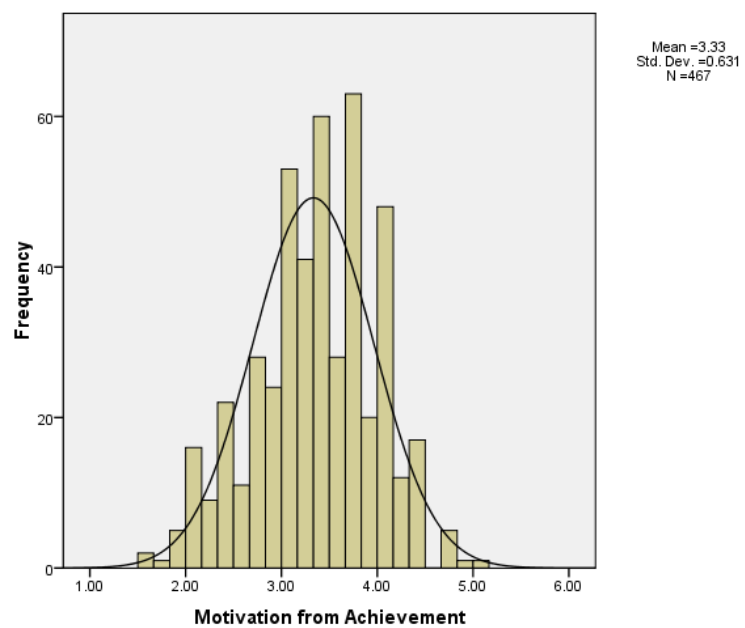


Figure 5 Q-Q Plot for distribution of scores for *Achievement*

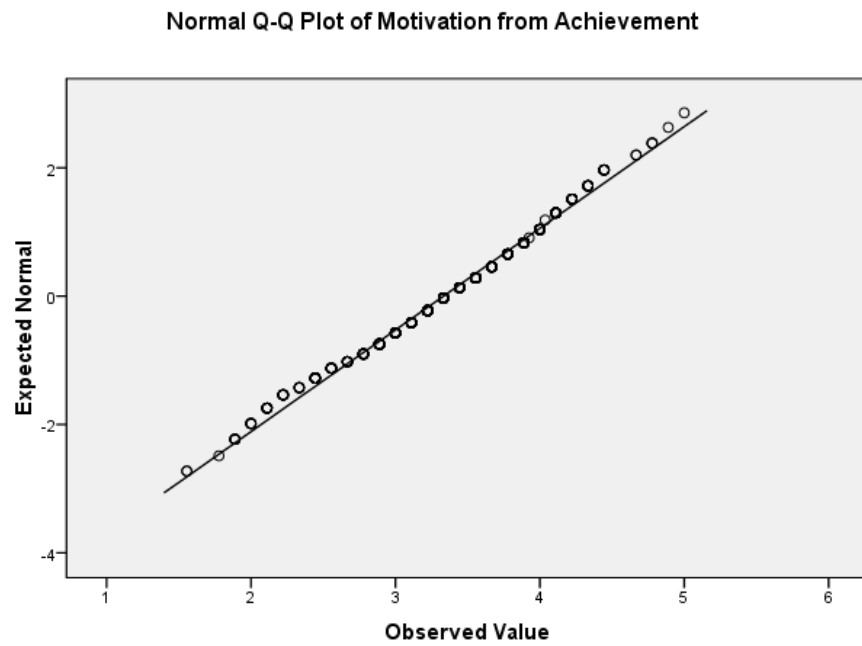


Figure 6 Histogram of Motivation from the *Work Itself*

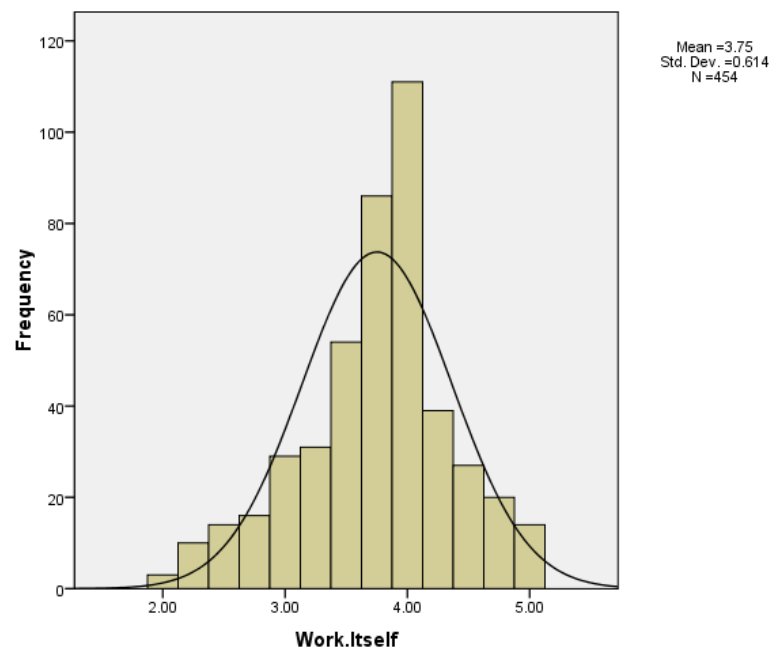


Figure 7 Q-Q Plot for distribution of scores for the *Work Itself*

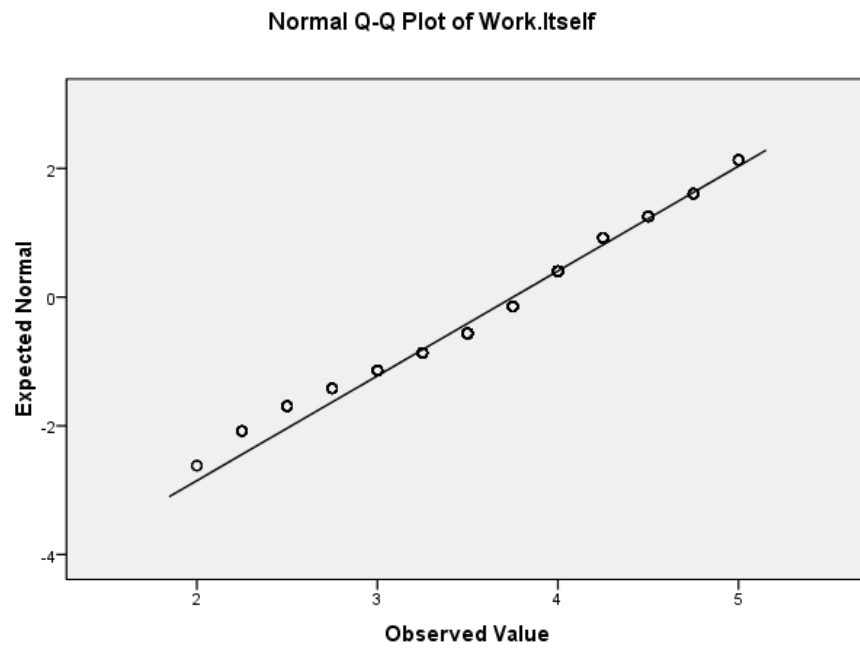


Figure 8 Normality Histogram for *Workplace Relationships*



Figure 9 Q-Q Plot for distribution of scores for *Workplace Relationships*

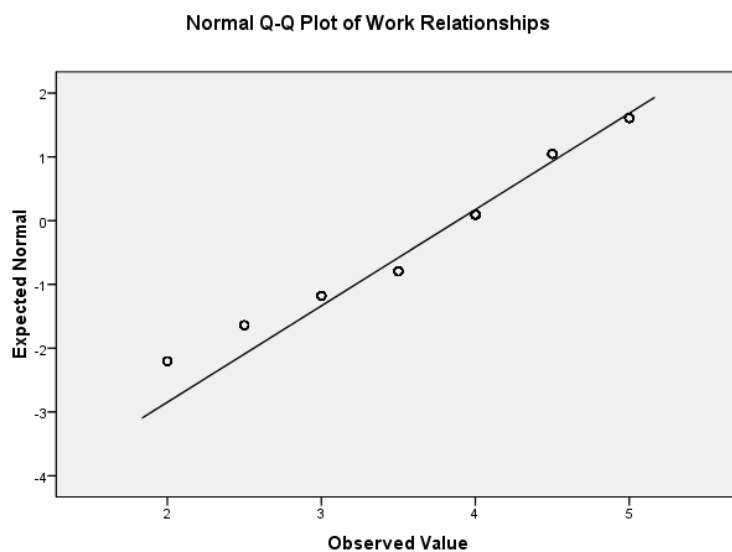


Figure 10 Normality Histogram for *Pay and Conditions*

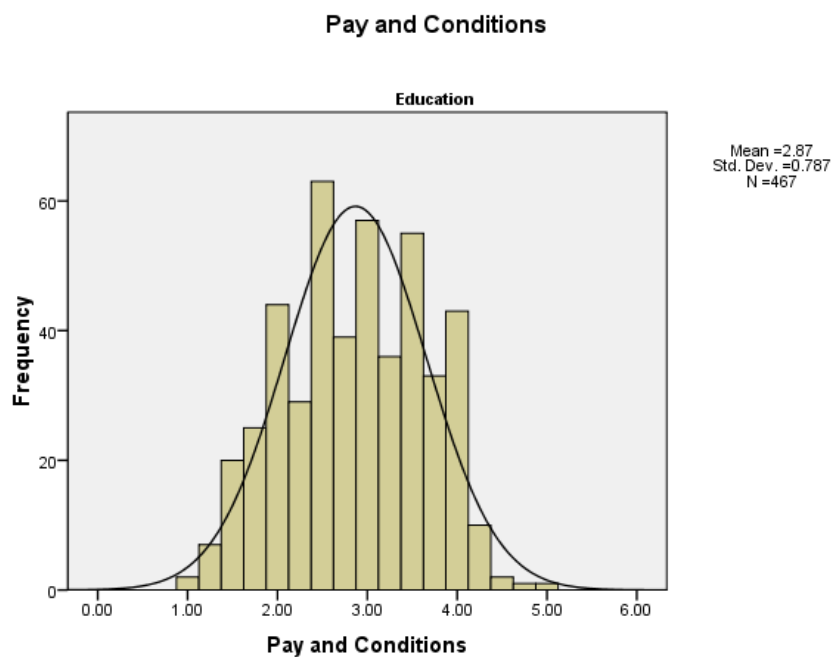
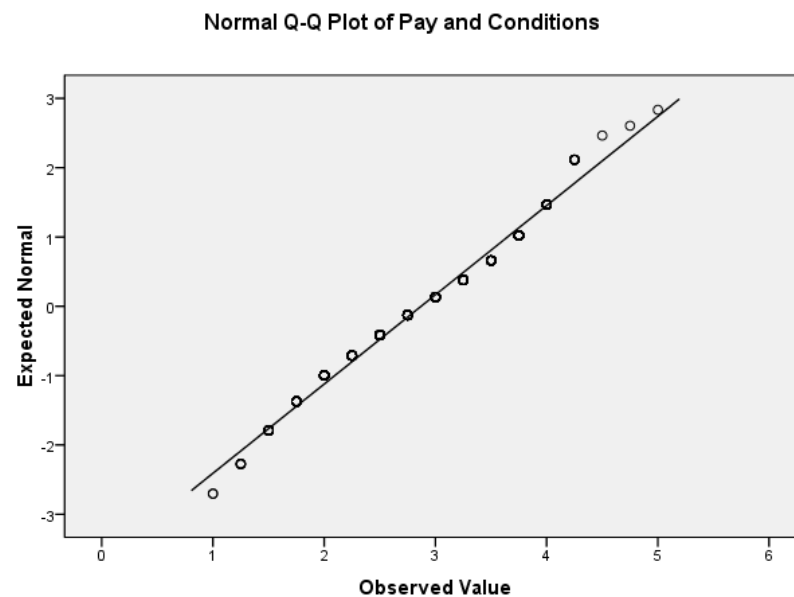


Figure 11 Q-Q Plot for distribution of scores for *Pay and Conditions*



These histograms and Q-Q Plots indicate that all the Prime Motivational Factors have normal distribution scores and are suitable for further statistical analysis.

CORRELATION OF VARIABLES

MANOVA works best where there is a moderate correlation between the dependent variables (Field, 2005, Pallant, 2005). Where there is no or an extremely low correlation there is no common basis for comparison and meaningful interpretation cannot be extracted. Where correlations are very high there is a danger of multicollinearity where results can be confusing because effectively the same variable is being measured twice or is embedded in another variable (Field, 2005). This danger arises where correlations exceed .8 (Pallant, 2005). To check this correlations between the dependent variables; the Prime

Motivational Factors were run using both Spearman's and Pearson's correlations.

The results are portrayed below.

Table 17 Spearman's Non-parametric correlations between Prime Motivational Factors.

	Prime Motivational Factors	FEELING VALUED	ACHIEVEMENT	WORK. Itself	RELATIONSHIPS	PAY & CONDITIONS
Spearman's rho	Feeling Valued	1.000 .000 494	.328** .000 493	.605** .000 494	.332** .000 494	.446** .000 494
	Achievement	.328** .000 493	1.000 .000 493	.216** .000 493	.217** .000 493	-.021 .644 493
	Work.Itself	.605** .000 494	.216** .000 493	1.000 .000 494	.309** .000 494	.248** .000 494
	Relationships	.332** .000 494	.217** .000 493	.309** .000 494	1.000 .000 494	-.058 .201 494
	Pay & Conditions	.446** .000 494	-.021 .644 493	.248** .000 494	-.058 .201 494	1.000 .000 494

Table 18 Pearson's product-moment correlations between Prime Motivational Factors.

		Correlations				
		Feeling Valued	Achievement	Work Itself	Relationships	Pay & Conditions
Valued	Pearson Correlation	1.000	.361**	.605**	.336**	.443**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	494	493	494	494	494

Achievement	Pearson Correlation	.361**	1.000	.221**	.221**	-.025
	Sig. (2-tailed)	.000		.000	.000	.577
	N	493	493	493	493	493
Work .Itself	Pearson Correlation	.605**	.221**	1.000	.301**	.247**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	494	493	494	494	494
Relationships	Pearson Correlation	.336**	.221**	.301**	1.000	-.033
	Sig. (2-tailed)	.000	.000	.000		.468
	N	494	493	494	494	494
Pay and Conditions	Pearson Correlation	.443**	-.025	.247**	-.033	1.000
	Sig. (2-tailed)	.000	.577	.000	.468	
	N	494	493	494	494	494

** . Correlation is significant at the 0.01 level (2-tailed).

Applying Cohen's (1988) interpretation a small correlation ranges from .10 to .29, a medium correlation ranges from .30 to .49 and a large correlation .50 to 1.0. It can be seen from above tables that the Prime Motivational Factors *Feeling Valued* and *Work Itself* have a large correlation of .605. Although this is a large correlation it is not highly correlated to the extent of creating concerns of multicollinearity as this only becomes a concerns for values above .80 (Pallant, 2005). All these Prime Motivational Factors are therefore suitable to apply together with MANOVA.

Because Multiple Regression Analysis similarly is sensitive to multicollinearity and singularity, multicollinearity becomes a problem with multiple regression analysis when independent variables are highly correlated and r factors equal or exceed .9 (Pallant, 2005). When tested for correlation the independent variables revealed the correlation shown in Table 19 below.

Table 19 Pearson's product-moment correlations between Independent Variables.

		Correlations				
		Service in Years	Age by Group	Education by Group	Rank by Group	sex
Tenure as Service in Years	Pearson Correlation	1	.668**	-.100*	.836**	-.259**
	Sig. (2-tailed)		.000	.037	.000	.000
	N	456	446	439	422	456
Age by Group	Pearson Correlation	.668**	1	-.137**	.530**	-.246**
	Sig. (2-tailed)	.000		.004	.000	.000
	N	446	446	431	414	446
Education by Group	Pearson Correlation	-.100*	-.137**	1	.058	.146**
	Sig. (2-tailed)	.037	.004		.237	.002
	N	439	431	457	423	457
Rank by Group	Pearson Correlation	.836**	.530**	.058	1	-.166**
	Sig. (2-tailed)	.000	.000	.237		.000
	N	422	414	423	460	460
Sex	Pearson Correlation	-.259**	-.246**	.146**	-.166**	1
	Sig. (2-tailed)	.000	.000	.002	.000	
	N	456	446	457	460	494

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As can be seen in Table 19, the only highly correlated pair of variables are Tenure as years of service and Rank. These two independent variables have a Pearson's co-efficient of correlation of .836 which almost reaches the level of highly correlated as stipulated by Pallant (2005). To include these two independent variables in a multiple regression would introduce the possibility of errors caused by the multicollinearity as the analysis could effectively be measuring the same thing twice. When all the independent variables have been

analysed together in a multiple regression the variable Tenure has consistently exerted a much stronger influence on the dependent variable than the variable Rank. The body of literature for police and non-police occupations also suggests that Tenure is a more influential variable on dependent variables than Rank (Bragg, 2004; Chiou, 2004; Holden, 1983). For these reasons it was decided to eliminate the variable Rank from multiple Regression analysis.

MANOVA RESULTS OF FIVE PRIME MOTIVATIONAL FACTORS

MANOVAs were conducted to explore for significant variance between the five Prime Motivational Factors with score ranging from one to five, and the demographic independent variables of: Age, Tenure, Sex, Rank and Education Level. A separate MANOVA was conducted for each independent variable, and significance and effect size for each Prime Motivational Factor were explored for each. Mahalanobis distances were initially measured and outliers identified and removed to bring the Mahalanobis distance to within the critical value of 20.52. MANOVAs were then conducted using SPSS 15. As there are 5 dependent variable factors the Bonferroni adjustment was set at .01. The omnibus MANOVA proved to be statistically significant at 0.01. Pair wise comparisons were then conducted to further explore the relationship between the dependent variables (*Feeling Valued, Achievement, the Work Itself, Workplace Relationships and Pay and Conditions*).

A one-way between groups multivariate analysis of variance was performed to explore differences between age groups and dependent Prime Motivational Factors. The five Prime Motivational Factors were: *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships*, and *Pay and Conditions*. The independent variable was age. All outliers were removed and linearity was explored with split file scatter plots and found to be satisfactory. Preliminary assumptions of normality, univariate and homogeneity of variance-covariance matrices, and multicollinearity were tested initially and no serious violations found. There was a significant difference between the three different age groupings and the motivational factors $F(5,438) = 7.267$ Significance ($<.01$); Wilks' Lambda = .853; partial eta squared = .077.

When the effects between each dependent Prime Motivational Factor were considered independently for statistically significant differences using the Bonferroni adjusted alpha of .010, the dependent variables: *Feeling Valued* ($p=.01$), *Achievement* ($p=.01$), *Work Itself* ($p=.01$), and *Pay and Equipment* ($p=.01$) proved significant whilst *Work Itself* did not ($p=.408$).

Where significant relationships have been found further analysis will be conducted using ANOVA to explore the variance between groups within the dependent variable. These data will be used together in the Discussion chapter (6), to compare with previous studies and aid in answering the research questions.

The one-way between groups multivariate analysis of variance was performed to explore differences between males and females, and the dependent Prime Motivational Factors. The five Prime Motivational Factors were: *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships*, and *Pay and Equipment*. The

independent variable was sex. All multivariate outliers were removed prior to analysis and linearity was confirmed by examination of split file scatter plots. Assumptions of normality, univariate and homogeneity of variance-covariance matrices, and multicollinearity were tested initially and no serious violations found. There was a significant difference between males and females, and the Prime Motivational Factors: $F(5,480) = 7.267$; $p < .01$; Wilks' Lambda = .958 and partial eta squared = .042. When the results of each dependent motivational factor were considered independently for statistically significant differences using the Bonferroni adjusted alpha of .010, only the variables, *Feeling Valued* ($p = .01$) and *Achievement* ($p = .01$) were significant. This indicates that sex has a statistically significant influence on the Prime Motivational Factors of *Feeling Valued* and *Achievement* only.

The one-way between groups multivariate analysis of variance was performed to explore differences between tenure groups and the Prime Motivational Factors. The five Prime Motivational Factors were: *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships*, and *Pay and Conditions*. The independent variable was tenure as measured by years of police service and categorised into seven groups (Group 1: 2 years and less, Group 2: 3 to 5 years, Group 3: 6 to 8 years, Group 4: 9 to 13 years, Group 5: 14 to 18, Group 6: 19 to 24 years and Group 7: 25 to 46 years). All outliers were removed and linearity was examined with split file scatter plots. Assumptions of normality, univariate and homogeneity of variance-covariance matrices, and multicollinearity were tested initially and no serious violations found. There was a significant difference between the different tenure groups and the Prime Motivational Factors; $F(30, 440) = 7.304$, $p < .01$, Wilks' Lambda = .628; partial eta squared = .089. When the

effects between each dependent Prime Motivational Factor were considered independently for statistically significant differences using the Bonferroni adjusted alpha of .010 every factor proved significant: *Feeling Valued* ($p=.01$), *Achievement* ($p=.01$), *Work Itself* ($p=.01$), *Relationships* ($p=.01$), and *Pay and Equipment* ($p=.01$). This indicates that tenure has a statistically significant influence on each of these dependent variables.

The one-way between groups multivariate analysis of variance was performed to explore differences between rank groups and dependent Prime Motivational Factors. The five Prime Motivational Factors were: *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships*, and *Pay and Equipment*. The independent variable was rank which was categorized as: Group 1: Constables, Group 2: Senior Constables, Group 3: Sergeants and Group 4 Senior Sergeants and Commissioned Officers. All univariate and multivariate outliers were removed and linearity was examined by means of split file scatter plots prior to analysis. Box's test showed a significance of .000. Tabachnick and Fidell (2001) advise that when sample size is large the test may be too sensitive. It was decided to proceed with the test on the understanding that there may have been a violation of the assumption on homogeneity of variance of covariance matrices. Other than this assumption of equality of covariance assumptions of normality, univariate and multicollinearity were tested initially and no serious violations were found. There was a significant difference between the different tenure groupings and the motivational factors: $F(15,453)=11.618; p<.01$; Wilks' Lambda .697 and Partial Eta Squared = .114. When the results of each dependent motivation factor were considered independently for statistically significant differences using the Bonferroni adjusted alpha of .01 every factor proved significant: *Feeling Valued*

($p=.01$), *Achievement* ($p=.01$), *Work Itself* ($p=.01$), *Relationships* ($p=.01$), and *Pay and Conditions* ($p=.01$). This indicates that rank has a statistically significant influence on each of these motivator factors.

The one-way between groups multivariate analysis of variance was performed to explore differences between education groups and Prime Motivational Factors. The five Prime Motivational Factors were: *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships* and *Pay and Conditions*. The independent variable was education. Education groups were categorised into: Group 1: High School and Trade, Group 2: Diploma, Group 3; undergraduate University and Group 4: Post-graduate University. All multivariate outliers were removed and linearity was examined with split file scatter plots and found satisfactory prior to further analysis. There was a significant difference between the different education groupings and the motivational factors: $F(15, 448)=1.612, p=.018$; Wilks' Lambda =.948; partial eta squared= .018. Levene's test for significance was .05 or above for each Prime Motivational Factor. When the results of each dependent motivation factor were considered independently for statistically significant differences using the Bonferroni adjusted alpha of .010 only one Prime Motivational Factor proved significant and approximated the cut off point : *Advancement* (.013). *Feeling Valued* showed a significance level of .029 and the other three were all clearly not statistically significant with p values greater than .2. This indicates that education has a statistically significant influence only on *Achievement*.

In summary MANOVA revealed statistically significant relationships between each independent variable and some Prime Motivational Factors although

the effect size as measured by Partial Eta Squared was usually small. Age has a statistically significant relationship with *Feeling Valued*, *Achievement*, *Relationships* and *Pay and Conditions* but only a medium to low effect size (eta squared =.07). Sex has a statistically significant relationship with *Feeling Valued* and with *Achievement*, but only low effect size (eta squared =.04). Tenure has a statistically significant relationship with *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships* and with *Pay and Conditions*, but only a moderate effect size (partial eta squared =.089). Although analysis of Rank proceeded on the understanding that there was uncertainty in regards to the assumption of homogeneity of variance the MANOVA was performed and indicated that Rank has a statistically significant relationship with all the Prime Motivational Factors; *Feeling Valued*, *Achievement*, *Work Itself*, *Relationships* and *Pay and Conditions*. Only two of these had other than low effect sizes; *Pay and Conditions* (partial eta squared =.143) which was a strong effect size and *Feeling Valued* (partial eta squared =.090) which had a medium effect size. Education only proved a statistically significant relationship with *Advancement* ($p=.13$). The effect size for this relationship however was weak (partial eta squared = .018). All significant relationships that were revealed by MANOVA were considered worthy of more detailed exploration with ANOVA. The important results of MANOVA and ANOVA will then be considered in the light of effect size in Chapter 6, Discussion.

ANOVA RESULTS

BETWEEN GROUP COMPARISONS FOR AGE

For each Prime Motivational Factor that demonstrated a statistically significant relationship with an independent variable when analysed by MANOVA, a one-way ANOVA will be used to compare the variance between and within the different groups. In each case the means for groups within a single independent variable will be compared in relation to a single Prime Motivational Factor. This examination will be made using the Prime Motivational Factors which are measured on a score ranging from 1 to 5. Whilst the MANOVAs show the statistical significance and effect size of the relationship between a Prime Motivational Factor and an independent variable the ANOVA will show more precisely what statistically significant differences may exist between the groups within a demographic variable. For example the MANOVA showed that there was a statistically significant relationship between the Prime Motivational Factor *Pay and Conditions* and the independent variable Rank and that the effect size was large (partial eta squared = .149). The ANOVA on the other hand will explain whether the relationship between *Pay and Conditions* is the same for Senior Officers as it is for Constables and how the two groups compare in terms of statistical significance and effect size.

A one-way between groups analysis of variance was conducted to explore the impact of age on the motivational factors of: *Feeling Valued, Achievement, Work Itself* and *Pay and Conditions*. Subjects were divided into three groups according to their age (Group 1: 25 to 33 years old; Group 2: 34 to 41 years old and Group 3: 42 to 60 years old).

When this analysis of variance was conducted in regard to the impact of age on the Prime Motivational Factor of *Feeling Valued* there was a statistically significant difference at the $p < .05$ level in Likert scores for the three age groups [$F(2, 443) = 6.275, p < .01$]. Despite reaching statistical significance, the actual difference in mean scores between groups was low. The effect size, calculated using eta squared, was .027 which is a small effect (Cohen, 1988). Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=3.226, SD=.4917$) was significantly different from Group 3 ($M=3.021, SD=.5114$). There were no other statistically significant differences.

When this analysis of variance was conducted in regard to the impact of age on the factor of *Achievement* there was a statistically significant difference at the $p < .05$ level for the three age groups [$F(2, 442) = 9.783, p < .01$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .042. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=3.448, SD=.547$) was significantly different from Group 3 ($M=3.195, SD=.708$) and that the difference between Group 2 ($M=3.387, SD=.713$) and Group 3 ($M=3.195, SD=.708$) is also statistically significant. There was no other statistically significant difference between groups.

When this analysis of variance was conducted in regard to the impact of age on the factor of *Workplace Relationships* there was a statistically significant difference at the $p < .05$ level in Likert scores for the three age groups [$F(2, 443) = 16.501, p < .01$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using partial

eta squared, was .071. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=4.100$, $SD=.5756$) was significantly different from Group 2 ($M=3.878$, $SD=.7000$) and Group 3 ($M=3.6429$, $SD=.7664$). Post-hoc comparisons using Tukey HSD test also indicated a statistically significant difference between Group 2 ($M=3.878$, $SD=.7000$) and Group 3 ($M=3.6429$, $SD=.7664$). The examination therefore indicated that each of the three age groups has a statistically significant relationship with each of the other two groups.

When this analysis of variance was conducted in regard to the impact of age on the Prime Motivational Factor of the *Pay and Conditions* there was a statistically significant difference at the $p .011$ level in Likert scores for the three age groups [$F(2, 443) = 7.685$, $p < .001$]. The difference between groups reached statistical significance but the actual difference in mean scores between groups was only moderate. The effect size, calculated using eta squared, was .070. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=4.106$, $SD=.5756$) was significantly different from Group 2 ($M = 3.8783$, $SD=.7004$) and that there was a statistically significant difference between Group 2 ($M = 3.8783$, $SD=.7004$) and Group 3 ($M = 3.6428$, $SD=.7664$). There was no other statistically significant difference between groups.

Overall, although there were statistically significant differences between the three age groups for each of the four Prime Motivational Factors identified as statistically significant by MANOVA (*Feeling Valued*, *Achievement*, *Relationships* and *Pay and Conditions*) the mean differences were at the most barely moderate. Likewise the strongest effect size was partial eta squared .071 for *Achievement*. This was marginally greater than .060 which Cohen (1988) prescribes as the limit

for weak effect sizes. Age then is not an important predictor of police workplace motivation and a variable of limited use when managing the workplace motivation of police officers.

BETWEEN GROUP COMPARISONS FOR TENURE.

Initially data for tenure were entered by each subject entering the number of years he or she had served as a police officer. This ranged from one year to forty-six years. In its initial form a complete ANOVA with tests for equity of means could not be conducted on this data because some cases had fewer than two entries. For this reason the graphs of means verse tenure for each of the five Prime Motivational Factor were compared and it was decided to divide the subjects into seven separate groups with the closest possible number of cases in each group according to tenure. Subjects were divided into seven groups according to the tenure in years they had served as police officers (Group 1: =>2 years; Group 2: 3 to 5 years; Group 3: 6 to 8 years; Group 4: 9 to 13 years; Group 5: 14 to 18 years; Group 6: 19 to 24 years; Group 7: <24 years).

This one-way between group analysis of variance was conducted in regard to the impact of tenure on the Prime Motivational Factor of *Feeling Valued* as measured by a Likert scale. There was a statistically significant difference at the $p < .001$ level in Likert scores for the seven tenure groups [$F(6, 449) = 13.622$, $p < .001$]. The difference between group means was statistically significant, with moderate difference in mean scores between groups. The effect size, calculated using eta squared, was .155. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=3.558$, $SD=.4352$) was significantly different from: Group 2 ($M =3.2045$, $SD=.4528$); Group 3 ($M =2.9794$,

$SD=.43255$); Group 4 ($M =2.9966, SD=.5289$); Group 5 ($M =3.0820, SD=.47449$); Group 6 ($M=2.9402, SD=.4980$) and Group 7 ($M=3.0571, SD=.47974$). Post-hoc comparisons using Tukey HSD test also indicated that the mean score for Group 2 ($M =3.2045, SD=.4528$) was significantly different from Group 1 ($M=3.558, SD=.4352$) and Group 6 ($M=2.9402, SD=.4980$). There were no other statistically significant differences between groups.

When this analysis of variance was conducted in regard to the impact of tenure on the Prime Motivational Factor of *Achievement* there was a statistically significant difference at the $p. <.001$ level in Likert scores for the five groups [$F(6, 469) = 7.192, p<.001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .116. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=50.667, SD=7.520$) was significantly different from Group 3 ($M =44.257, SD=9.778$); Group 4($M=43.155, SD=9.047$) and Group 5 ($M=42.057, SD=9.997$). Similarly the mean score for Group 2 ($M=46.331, SD=9.653$) was significantly different from Group 1 ($M =50.667, SD=9.047$); Group 3($M=44.257, SD=9.778$) and Group 4($=43.155, SD=9.047$). There were no other statistically significant differences within these groups.

When this analysis of variance was conducted in regard to the impact of tenure on the Prime Motivational Factor of *Work Itself* there was a statistically significant difference at the $p<.001$ level in Likert scores for the five tenure groups [$F(6, 449) = 6.792, p<.001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was very small. The effect size, calculated using eta squared, was .084. Post-hoc comparisons using Tukey HSD

test indicated that the mean score for Group 1 ($M=4.0543$, $SD= .5588$) was significantly different from Group 3 ($M =3.4925$, $SD=.5970$); Group 4 ($M=3.6435$, $SD=.6757$), Group 5 ($M=3.6791$, $SD =.6349$) and Group 6 ($M=3.537$, $SD=.6377$). Group 2 ($M =3.8294$, $SD=.5619$) was significantly different to Group 3 ($M =3.4925$, $SD=.5970$). Group 3 ($M =3.4925$, $SD=.5970$) was also statistically different from Group 7 ($M=3.8208$, $SD= .5985$). There were no other statistically significant differences between groups.

When this analysis of variance was conducted in regard to the impact of tenure on the Prime Motivational Factor of *Workplace Relationships* there was a statistically significant difference at the $p<.001$ level in Likert scores for the five tenure groups [$F(6, 449) = 6.931$, $p<.001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was very small. The effect size, calculated using eta squared, was .085. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=4.1232$, $SD=.5584$.) was significantly different from Group 5 ($M=3.6940$, $SD=.6393$.) and Group 7 ($M =3.4917$, $SD=.7061$). A statistically significant difference was also found between Group 2 ($M=4.0471$, $SD=.6841$) and Groups: 5 ($M =3.694$, $SD=.6394$.) Group 3($M =4.0149$, $SD=.5901$) also showed a statistically significant relationship with Group 7 ($M =3.4917$, $SD=.7061$). There were no other significantly differences between groups.

When this analysis of variance was conducted in regard to the impact of tenure on the Prime Motivational Factor of the *Pay and Conditions* there was a statistically significant difference at the $p <.001$ level in Likert scores for the five tenure groups [$F(6, 449) = 9.545$, $p<.001$]. Despite reaching statistical

significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .113. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=2.9746$, $SD=.69945$) was significantly different from Group 2 ($M=2.5412$, $SD=.69205$). Group 2 ($M=2.5412$, $SD=.6920$) also showed statistically significant differences with Group 5 ($M=3.0448$, $SD=.8035$), Group 6 ($M=2.9861$, $SD=.7045$) and Group 7 ($M=3.3542$, $SD=.6399$). Likewise the mean score for Group 3 ($M=2.6157$, $SD=.8028$) was statistically significantly different from Group 5 ($M=3.0448$, $SD=.8035$) and Group 7 ($M=3.3542$, $SD=.6399$). Group 4 ($M=2.7685$, $SD=.8576$) and Group 7 ($M=3.3542$, $SD=.6399$) were also significantly different. There was no other statistically significant difference between groups.

Overall, there were statistically significant differences between most of the seven tenure groups for each of the Prime Motivational Factors (*Feeling Valued*, *Achievement*, *Work Itself*, *Relationships* and *Pay and Conditions*). The mean differences tended to be small to moderate however the effect sizes as measured by partial eta squared was large for *Feeling Valued* (.155) and moderate for all the other Prime Motivational Factors ; *Achievement* (.116), *Work Itself* (.084), *Workplace Relationships* (.085) and *Pay and Conditions* (.113). The two least experienced groups, Group 1 with two years service or less and Group two with three to six years experience consistently showed statistically significant variance with the other more experienced groups across all Prime Motivational Factors. For *Feeling Valued*, *Achievement*, *Work Itself* and *Relationships* the pattern was that these two junior groups had high motivation that rapidly plummeted to the levels of Groups 3 to Group 7. For *Pay and Conditions* the pattern is the opposite where *Pay and Conditions* is initially a strong motivator for Group 1 but drops to its

lowest point for Group 2 and then progressively becomes a stronger motivator as an officer's tenure increases. Tenure then is a very important predictor of police workplace motivation will be discussed in detail in the following Chapter 6, Discussion.

BETWEEN GROUP COMPARISONS FOR VARIABLE SEX

When this analysis of variance was conducted in regard to the impact of sex on the Prime Motivational Factor of *Feeling Valued* there was a statistically significant difference at the $p, < .001$ level in between male and female groups [$F(1, 473) = 13.067, p = < .001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was moderate. The effect size, calculated using eta squared, was .058. Post-hoc comparisons using Tukey HSD test indicated that the mean score for males ($M=3.0853, SD=.4913$) was significantly different from the mean score for females ($M = 3.2652, SD=.5113$).

When this analysis of variance was conducted in regard to the impact of sex on the Prime Motivational Factor of the *Achievement* there was a statistically significant difference at the $p, < .001$ level between male and female groups [$F(1, 472) = 13.230, p = < .001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was moderate. The effect size, calculated using eta squared, was .027. Post-hoc comparisons using Tukey HSD test indicated that the mean score for males ($M=3.3163, SD=.6429$) was significantly different from the mean score for females ($M = 3.5549, SD=.6784$).

These were the only Prime Motivational Factors that showed a statistically significant difference between the mean scores for males and females.

Overall, an analysis of variance of mean scores between males and females for the two Prime Motivational Factors identified by MANOVA as statistically significant (*Feeling Valued* and *Achievement*) showed that both groups had statistically significant relationships with the two Prime Motivational Factors. For *Achievement* however the mean difference tended to be moderate while for *Feeling Valued* it was small. Likewise the effect size for both was small *Feeling Valued* (partial eta squared= .026) and *Achievement* (partial eta squared=.027). Sex therefore does not appear to be an important predictor of police workplace motivation.

BETWEEN GROUP COMPARISONS FOR RANK.

The groupings for rank were as follow: Group 1: Constables; Group 2: Senior Constables; Group 3: Sergeants; Group 4: Senior Sergeants and Commissioned Officers. When this analysis of variance was conducted in regard to the impact of rank on the Prime Motivational Factor of the *Feeling Valued* there was a statistically significant difference at the $p < .001$ level for the four rank groups [$F(3, 456) = 14.906, p < .001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .090. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M=3.2621, SD=.5031$) was significantly different from Group 2 ($M =2.9472, SD=.4582$); Group 3 ($M =2.9972,$

$SD=.4685$). Group 4 ($M = 3.2661, SD=.4498$) was found to have statistically significant differences with Group 2 ($M = 2.9472, SD=.4582$) and Group 3 ($M = 2.9972, SD=.4685$).

When this analysis of variance was conducted in regard to the impact of rank on the Prime Motivational Factor of *Work Itself* there was a statistically significant difference at the $p < .001$ level in Likert scores for the four rank groups [$F(3, 456) = 5.969, p < .001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was very small. The effect size, calculated using eta squared, was .038. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M = 3.850, SD=.6167$) was significantly different from Group 2 ($M = 3.5625, SD=.6373$). Post-hoc comparisons using the Tukey HSD test also showed statistically significant differences between Group 2 ($M = 3.5625, SD=.6373$) and Group 4 ($M = 3.8302, SD=.6226$).

When this analysis of variance was conducted in regard to the impact of rank on the Prime Motivational Factor of *Workplace Relationships* there was a statistically significant difference at the $p < .01$ level for the four rank groups [$F(3, 456) = 10.096, p < .001$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .062. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.0645, SD=.6638$) was significantly different from Group 2 ($M = 3.7984, SD=.6079$), Group 3 ($M = 3.600, SD=.7177$) and Group 4 ($M = 3.7654, SD=.7909$). There were no other significant differences between groups.

When this analysis of variance was conducted in regard to the impact of rank on the Prime Motivational Factor of the *Pay and Conditions* there was a statistically significant difference at the $p < .01$ level for the four rank groups [$F(3, 456) = 25.101, p < .001$]. The difference in mean scores between groups was large as indicated by an F ratio of 25.101. The effect size, calculated using eta squared, was .142. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M = 2.6016, SD = .7329$) was significantly different from Group 2 ($M = 2.9012, SD = .7762$), Group 3 ($M = 2.9825, SD = .7388$) and Group 4 ($M = 3.4722, SD = .6755$). Likewise the mean score for Group 2 ($M = 2.9012, SD = .7762$) and Group 4 ($M = 3.4722, SD = .6755$) indicated a statistically significant difference. Group 3 ($M = 2.9825, SD = .7388$) and Group 4 ($M = 3.4722, SD = .6755$). There was no other statistically significant difference between groups.

Overall, ANOVA revealed that there is statistically significant variance between groups for each of the Prime Motivational Factors. In particular, Group 1 (Constables) varied significantly from Group 2 (Senior Constables) for every Prime Motivational Factor. Group 1 also varied with Groups 3 and 4 for *Pay and Conditions* and *Workplace Relationships*. The effect sizes are generally moderate; *Workplace Relationships* (partial eta squared = .062) and *Feeling Valued* (partial eta squared = .090) although the effect for *Work Itself* is small (partial eta squared = .038) and for *Pay and Conditions* is large (partial eta squared = .142). The F value for *Pay and Conditions* is 25.1. This is a large value and indicates that there is a large variance between the four rank groups in regards to *Pay and Conditions*. These findings indicate that Rank is an important independent variable and predictor of police motivation and that there is large variance in motivation between different ranks according to *Pay and Conditions*.

BETWEEN GROUP COMPARISONS FOR EDUCATION.

The groupings for highest level of education were as follow: Group 1: High School or Trade Qualification, Group 2: TAFE Diploma/other equivalent, Group 3: University Undergraduate and Group 4: University Postgraduate. When this analysis of variance was conducted in regard to the impact of education on the Prime Motivational Factor of the *Feeling Valued* there was overall statistically significant difference at the $p = .028$ level in Likert scores for the six educational groups [$F(3, 453) = 2.364, p = .028$]. Despite reaching statistical significance, the actual difference in mean scores between groups was very small. The effect size, calculated using eta squared, was .020. The overall statistical significance for the differences between educational groups within the Prime Motivational Factor *Feeling Valued* was .028 which is within the .05 criteria generally set but outside the .01 level set as the Bonferroni adjustment level. Post-hoc comparisons using Tukey HSD test indicated significant mean score differences between Group 1 ($M = 3.0317, SD = .4948$) and Group 2 ($M = 3.2126, SD = .5332$).

When this analysis of variance was conducted in regard to the impact of education on the Prime Motivational Factor of *Achievement* there was a statistically significant difference at the $p = .005$ level in Likert scores for the six educational groups [$F(3, 452) = 3.631, p = .013$]. Despite reaching statistical significance, the actual difference in mean scores between groups was small. The effect size, calculated using eta squared, was .024. Post-hoc comparisons using Tukey HSD test indicated that the mean score for Group 1 ($M = 3.226, SD = .766$) was significantly different from Group 3 ($M = 3.453, SD = .611$) and Group 4

($M=3.501$, $SD=.621$). There were no other statistically significant differences between these groups.

Overall the differences between educational groups for the Prime Motivational Factors was of borderline significance being outside the scope set for Bonferroni adjustment but well within the conventional level of .05; *Feeling Valued* ($p=.028$) and *Achievement* ($p=.013$). The difference in means in both cases was small and the effect sizes was also small *Feeling Valued* (partial eta squared=.020) and *Achievement* (partial eta squared=.024). The F values for both of these were also low; indicating only small variance between groups. Differences in police officers education levels therefore do not have a large effect on police motivation.

SUMMARY OF ANOVAs.

ANOVAs were conducted for each independent variable and Prime Motivational Factor that was identified by MANOVA as demonstrating statistically a significant variance. Age was not found to be an important predictor of police workplace motivation and is only of limited use when managing the workplace motivation of police officers.

There were statistically significant differences between most of the seven tenure groups for each of the Prime Motivational Factors (*Feeling Valued*, *Achievement*, *Work Itself*, *Relationships* and *Pay and Conditions*). The mean differences tended to be small to moderate however the effect sizes as measured by partial eta squared was large for *Feeling Valued* (.155) and moderate for all the other Prime Motivational Factors ; *Achievement* (.116), *Work Itself* (.084), *Workplace Relationships* (.085) and *Pay and Conditions* (.113). The two least

experienced groups, Group 1 with two years service or less and Group two with three to six years experience consistently showed statistically significant variance with the other more experienced groups across all Prime Motivational Factors. Tenure was found to be an important predictor of police workplace motivation where the officer's tenure in years of service tends to have an important impact on his or her motivation. Gender differences on the other hand do not appear to be an important predictor of police workplace motivation.

Educational groups showed only a small difference in the mean scores for *Feeling Valued* and *Achievement*. In both cases the effect sizes was also small *Feeling Valued* (partial eta squared=.020) and *Achievement* (partial eta squared=.024). Differences in police officers education levels therefore do not have a large effect on police motivation.

Rank showed statistically significant differences between groups and the effect size for *Pay and Conditions* is large (partial eta squared= .142). The F value for *Pay and Conditions* is 25.1. This is a large value and indicates that there is a large variance between the four rank groups in regards to *Pay and Conditions*. These findings indicate that Rank is an important independent variable and predictor of police motivation and that there is large variance in motivation between different ranks according to *Pay and Conditions*.

MULTIPLE REGRESSION RESULTS

CHECKING ASSUMPTIONS FOR ANALYSIS BY REGRESSION.

Standard multiple regression is commonly used to evaluate the extent to which each independent variable contributes to the unique variance of each particular dependent variable. In this study the independent variables are the demographic groups whilst the dependent variables are the Prime Motivational Factors. Because a key question in this research is to determine how police motivation varies according to generational cohorts, multiple regression was used to determine the effects of independent variables of age and tenure on all five dependent variables, independent of the influence of the other variables. In addition the multiple regression technique will provide information about the Prime Motivational Factors model as a whole by showing how the components fit together to contribute to the model.

Normality, collinearity and homoskedasticity were performed and checked to ensure compliance with regression assumptions. Multiple regression is a statistical technique that is very sensitive to small samples where the distribution is skewed and where there are fewer than 15 subjects per predictor (Tabachnick & Fidell, 2001). In such a case the outcomes are likely to be unreliable (Pallant, 2005). In the present study; the sample is not small, approaches normal symmetry, and has about 90 subjects per predictor.

Multiple regression is also sensitive to outliers (Pallant, 2005). None of these assumptions were violated by the data in this study which were checked by, ensuring each cell had an appropriate number of cases, that all outliers were

removed before analysis and by using Normal P-P plots and scatter plots to check that normality was within limits. Where the correlation of independent variables is .9 or greater there is a danger of multicollinearity (Tabachnick & Fidell, 2001). In the present study the independent variables tenure and rank had a Pearson's correlation of .836 which approached but is below this cut off figure. When standard multiple regression analysis was run using all independent variables a coefficients table was produced that indicated the tolerance value for these two independent variables was well above .10 and the VIF value was well below 10 suggesting that multicollinearity was not a concern (Pallant, 2005). It was decided however to remove the independent variable rank from further analysis to take the possibility of any multicollinearity between these variables beyond any doubt. Rank and not tenure was removed because tenure has been repeatedly shown by the literature to be a stronger predictor of police workplace motivation (Beck, 1999; Bragg, 2005; Chiou, 2004). In addition the important question in regard any possible differences based on generational cohorts requires comparison between age and tenure not rank. Therefore the data were analysed by standard multiple regression using regressors of: age, tenure, sex and education for each of the five dependent variables. The residuals scatterplots and Normal Probability Plots for the each of the standard regressions of the dependent variables Feeling Valued, Achievement, Work Itself, Relationships and Pay and Conditions are shown below in Figures 12 to 21.

Figure 12 P-P Plot for Feeling Valued

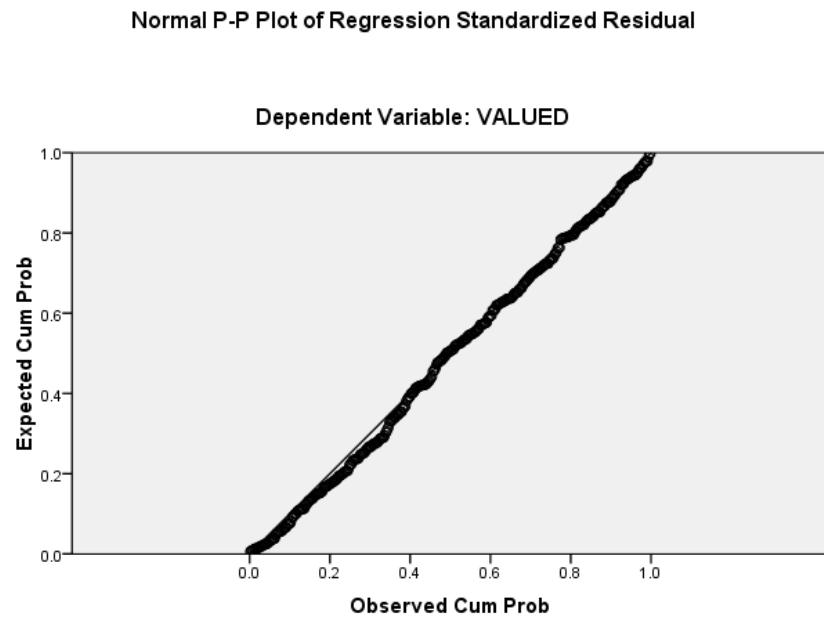


Figure 13 Scatterplot for Feeling Valued.

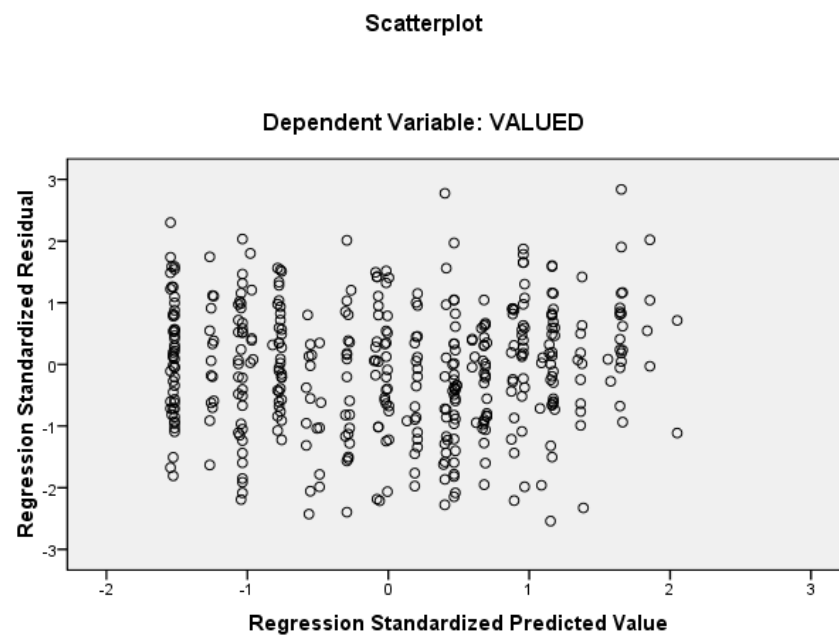


Figure 14 P-P Plot for Motivation from Achievement.

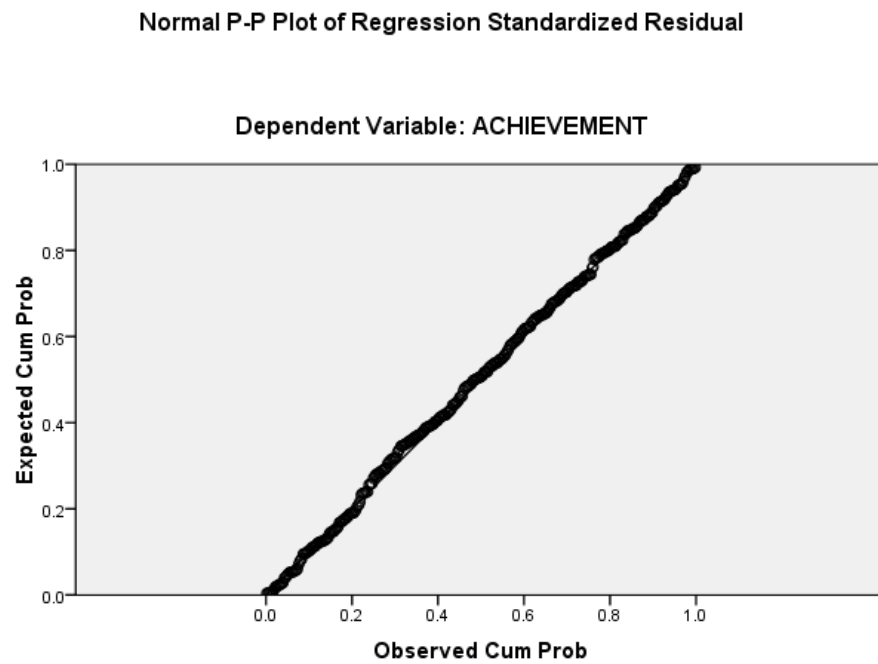


Figure 15 Scatterplot for motivation from Achievement.

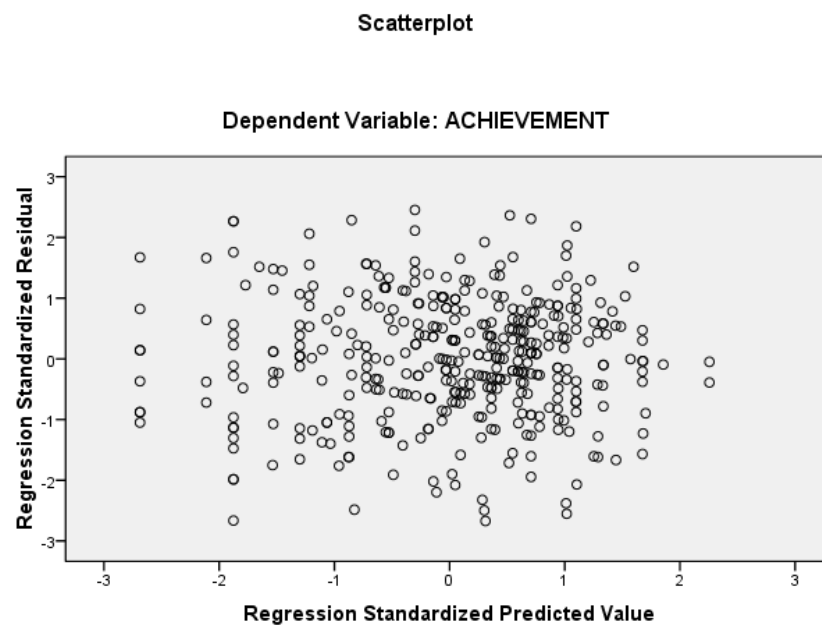


Figure 16 P-P Plot for Motivation from the Work Itself.

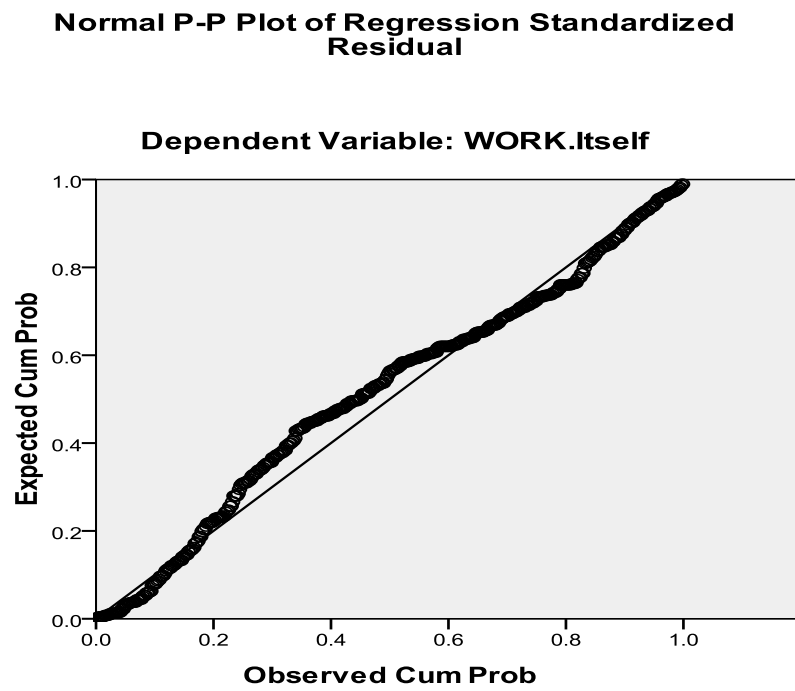


Figure 17 Scatterplot for the Work Itself.

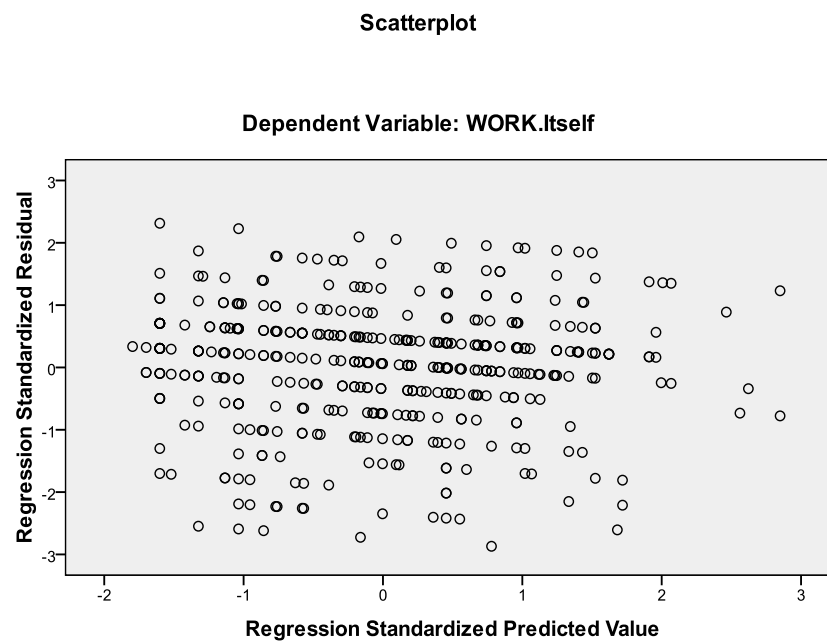


Figure 18 P-P Plot for Relationships.

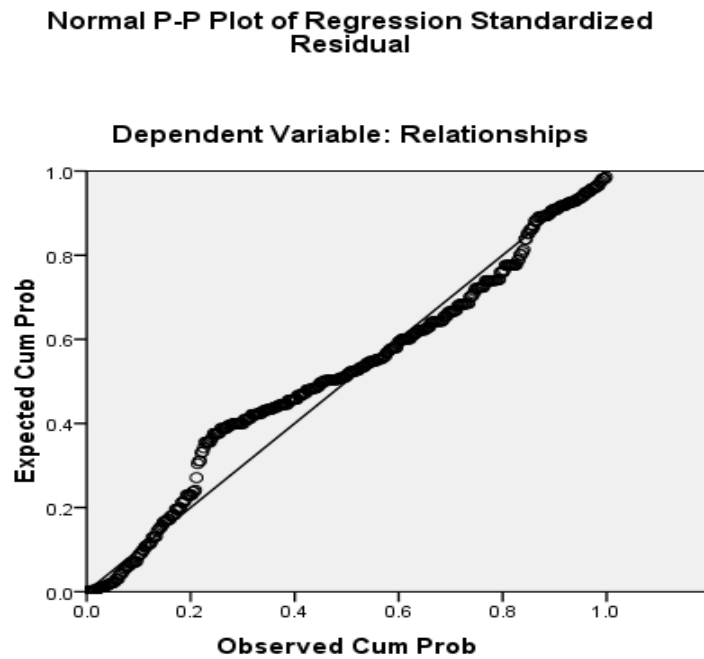


Figure 19 Scatterplot for Relationships.

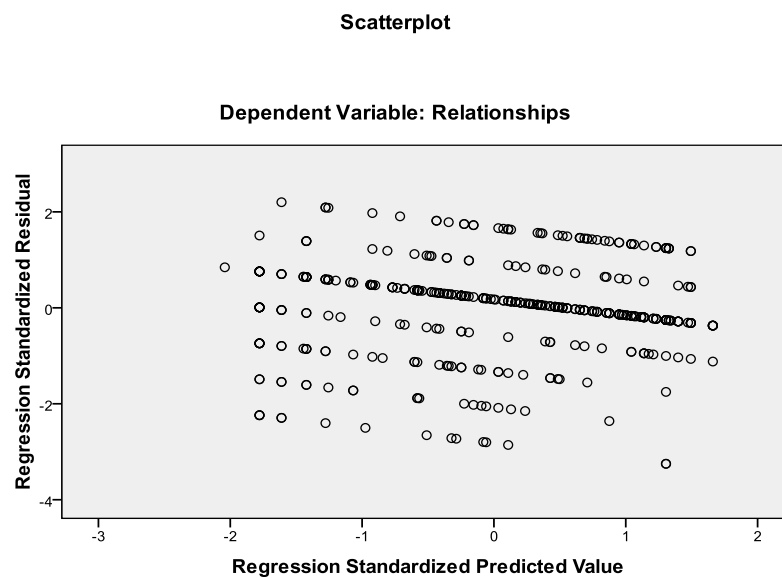


Figure 20 P-P Plot for Pay and Conditions.

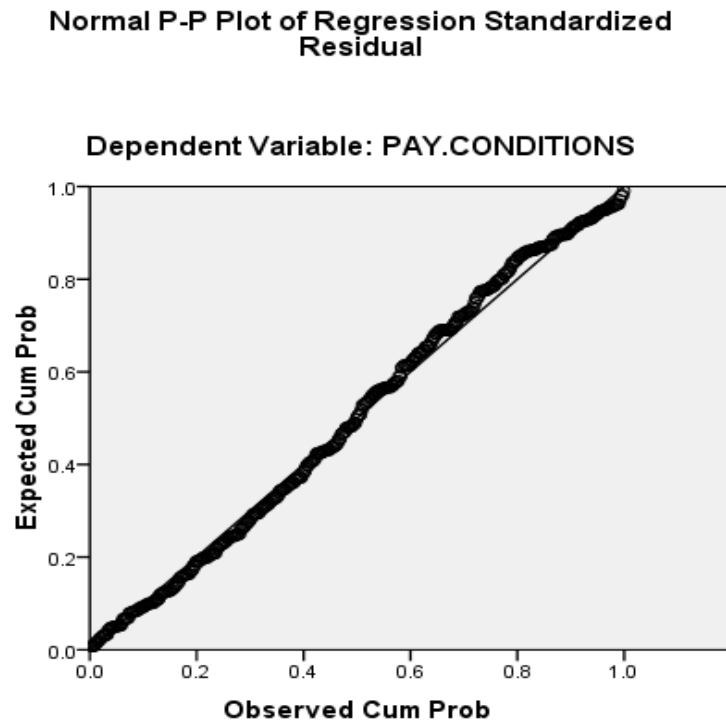
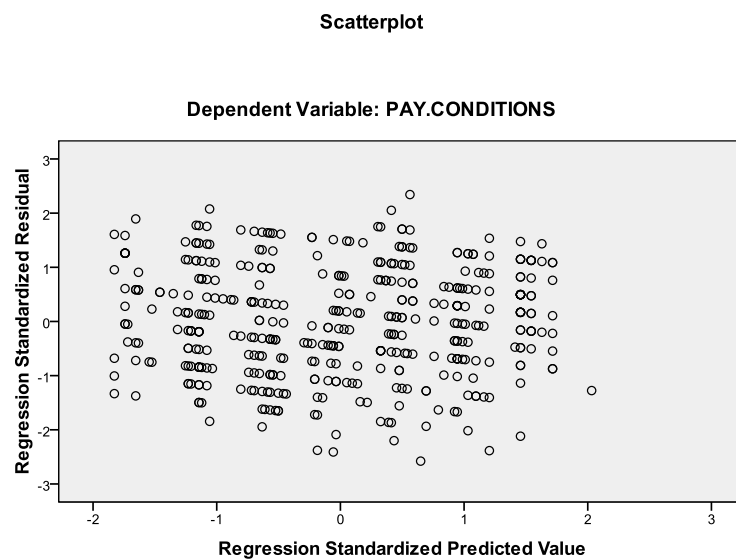


Figure 21 Scatterplot for Pay and Conditions.



The normal probability plots showed some variance with some lying closely along the straight diagonal line from bottom left to top right and others like

Relationships veering slightly off the line before realigning but all of these normal probability plots are within acceptable limits (Tabachnick & Fidell, 2001). The distribution of scores for each of these dependent variables as indicated by these probability plots does not indicate any major deviations from normality (Pallant, 2005). When scatterplots are roughly rectangular in shape and have most of the scores concentrated in the centre the pattern indicates that the assumptions of normality, multicollinearity, singularity and homoskedasticity are not violated (Pallant, 2005). Although there was some variance between the patterns for different Prime Motivational Factors, all the above scatterplots were within acceptable limits and formed rough rectangles (Tabachnick & Fiddell, 2001).

FINDINGS FROM MULTIPLE REGRESSION ANALYSIS

The five Prime Motivational Factors *Feeling Valued, Achievement, Work Itself, Relationships* and *Pay and Conditions* were analysed to determine how much of the dependent's variance is explained by the model. This was expressed as the R squared value. The analysis also sought the Standardised Beta coefficient for each independent variable to determine how much each independent variable contributes to the variance for that dependent variable (Pallant, 2005). The results of the analysis follow.

Table 20 Contribution of independent variables to the factor *Feeling Valued*

Model	Unstandardised Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.223	.119		27.160	.000
Sex	.102	.055	.092	1.857	.064
Service in Years	-.070	.016	-.281	-4.452	.000
Age by Group	.030	.039	.048	.762	.447
Education	-.001	.023	-.003	-.062	.951

a. Dependent Variable: VALUED

For the dependent variable *Feeling Valued*, the regression was a poor fit ($R^2 = 8.4\%$) but the overall relationship was significant ($F=9.89$, $p<.01$.) With all variables held constant the Beta score for tenure a negative .281 and significance was ($p<.01$) while the Beta Standardised Coefficient for age was .048 and not significant ($p=.447$).

Table 21 Contribution of independent variables to the factor *Achievement*

Model	Unstandardised Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	3.379	.162		20.889	.000
	Sex	.106	.074	.072	1.435	.152
	Service in Years	-.054	.022	-.158	-2.484	.013
	Age by Group	-.058	.052	-.069	-1.103	.271
	Education	.078	.031	.119	2.506	.013

For the dependent variable *Achievement*, the regression was a poor fit ($R^2 = 8.3\%$) but the overall relationship was significant ($F=9.422, p<.01$). With all variables held constant the highest Beta score was for tenure, a negative .156 and significance was ($p=.013$). The next highest Beta score (.119, $p=.013$) was for education while the Beta Standardised Coefficient for age was a negative .052 and not significant ($p=.271$).

Table 22 Contribution of independent variables to the factor *Pay & Conditions*

Model		Unstandardised Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.285	.191		11.960	.000
	Sex	.105	.087	.061	1.212	.226
	Service in Years	.094	.026	.233	3.632	.000

Age by Group	.020	.062	.021	.323	.747
Education	.016	.037	.021	.430	.668

For the dependent variable *Pay and Conditions*, the regression was a poor fit ($R^2 = 5.5\%$) but the overall relationship was significant ($F=6.07, p<.01$). With all variables held constant the Beta score for tenure was .233 and significance was ($p<.01$) while the Beta Standardised Coefficient for age was .021 and not significant ($p=.76$).

Table 23 Contribution of independent variables to the factor *Work Itself*

Model	Unstandardised Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	3.673	.155		23.627	.000
Sex	.048	.071	.035	.680	.497
Service in Years	-.054	.021	-.168	-2.568	.011
Age by Group	.063	.050	.082	1.262	.208
Education	.026	.030	.043	.880	.379

For the dependent variable the *Work Itself*, the regression was a poor fit ($R^2 = 2.3\%$) but the overall relationship was significant ($F=2.479, p<.04$). With all variables held constant the Beta score for tenure a negative .168 and significance was ($p=.011$) while the Beta Standardised Coefficient for age was .082 and not significant ($p=.208$).

Table 24 Contribution of independent variables to the factor *Work Relationships*

Model	Unstandardised Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.380	.167		26.284	.000
Sex	-.058	.076	-.038	-.760	.448
Service in Years	-.078	.022	-.217	-3.463	.001
Age by Group	-.107	.054	-.123	-1.986	.048
Education	.037	.032	.054	1.137	.256

For the dependent variable *Workplace Relationships*, the regression was a poor fit ($R^2 = 9.8\%$) but the overall relationship was significant ($F=11.41, p<.01$). With all variables held constant the Beta score for tenure a negative .217 and

significance was ($p=.001$) while the Beta Standardised Coefficient for age was a negative .123 and not significant ($p=.048$).

SUMMARY OF QUANTITATIVE RESULTS

The analysis of the quantitative data clearly identified five Prime Motivational Factors that motivate police in their work in Metropolitan North Region. Further analysis using MANOVAs and ANOVAs demonstrated significant variance between the independent (demographic) variables and the Prime Motivational Factors and between groups within the Prime Motivational Factors. This was followed by multiple regression analysis that demonstrated that one demographic variable consistently had the greatest impact on all five of the Prime Motivational Factors; namely *Feeling Valued*, *Achievement*, the *Work Itself*, *Work Relationships* and *Pay and Conditions* namely tenure. Next the qualitative comments were analysed and results were compared and contrasted to the results of the quantitative data. This is important because the qualitative results could validate or expose any limitation of the data from the quantitative survey. If the forced-answer questionnaire failed to include an important factor, this would be exposed by the qualitative results.

QUALITATIVE ANALYSIS AND RESULTS

At the conclusion of the questionnaire respondents were asked to provide qualitative comment by nominating what motivated them most in the workplace.

They were also invited to make any other comment on the subject. Of the total of 484 people who responded to the questionnaire 325 respondents provided a qualitative comment. The comments were initially read through and analysed for key themes or issues. The data were then coded by rereading the comments and recording each mention of a source of motivation under the respective initial element. A total of 53 initial elements were identified. A table of each element and frequency of mention of the respective element was drawn. After this was done the initial 53 recorded elements were considered and reduced to 47 categories. These categories were read over again and original comments reread. The 47 categories were then condensed into a more workable number of 16 sub-factors. This is the standard coding process used to analyse qualitative data (Wiersma, 2008).

Table 25 Comment frequency for elements of motivation

Element	Frequency	Element	Frequency
Recognition for work done	86	Unsupportive superiors	24
Managers focusing only on Negative feedback demotivates	8	Real leaders not just managers	4
Discipline/Complaint investigation process is demotivating	17	Quality supervisors who are competent	19
Feeling Valued	11	Doing quality work, the right thing.	39
Promotional systems has a negative effect	30	Disillusioned with the Court/Justice system	16
Prospect of promotion	13	Helping & supporting other police	12
Sense of Achievement	22	Helping victims of crime	17

Appreciation	17	Career	1
Meaning	5	Slow impractical policies, processes and systems	17
Exciting Work	3	Work overload	15
The work itself	10	Negative effects of Senior Officers' Ambition and office politics	13
Variety in work	4	Micro-management	12
Equipment that isn't faulty	7	Unfair inequitable treatment between staff	21
Adequate quality & supply of equipment	12	Responsibility	5
Low pay harms motivation	27	Negative media reporting	7
Pay	18	A sense of justice	5
Radios that work	5	Directed study (MDP, CDP)	4
6 weeks Holiday	1	No motivation – I am trapped waiting for retirement, the mortgage to be lower, kids to leave home before leaving.	8
Good work conditions	5	Attitude of public affects my motivation	8
Job lacks basic resources	9	Self Pride	12
Low staffing levels strains motivation	5	Making a difference- contributing to society	14
Supportive leaders & organization	26	Lack of training	4
Happy workplace with keen colleagues and camaraderie	27	Q prime	10
Being around negative people	15	The way General Duties police and policing is undervalued and unrecognized	8
Pride in the team	14	Job Security	1
Work Outcomes	5		

Many of these categories could easily be collapsed into broader categories.

For instance *recognition* and *demotivation from managers focusing only on negative feedback* both refer to the issue of the need for positive recognition of good work. Other factors required careful consideration of the underlying theme or value. Contractions were made that enabled the initial categories to be reduced

in number from 53 to 16. These resultant sub-factors could each be readily further categorised under one of the five motivational factors identified by the qualitative factor analysis. The following table illustrates the process.

Table26 Relationship between qualitative comments and the five Prime Motivational Factors

MOTIVATIONAL FACTOR	SUB-FACTOR	INITIAL CATEGORY
FEEL VALUED	Recognition	Recognition Focus on negative feedback Appreciation Attitude of Public Undervaluing General Duties Police
	Promotion	Promotion Promotional system that lacks credibility
	Discipline Investigations	Discipline/Complaint investigation process is de-motivating Unfair inequitable treatment between staff
ACHIEVEMENT	Intrinsic Drive	Achievement Self Pride Negative Media Training
	Responsibility	Responsibility Micro Management
WORK ITSELF	Sense of Purpose	Meaning Helping/supporting other police Helping/supporting victims of crime Contributing to society A sense of justice
	Productive results	Working for positive outcomes Performing quality work Demotivated by Courts and Justice System
	Work itself	Exciting work – adrenaline rush Doing the jobs The variety of work

PAY & CONDITIONS	Equipment	Adequate Equipment Non-faulty Equipment Radios that work Lack of resources
	Pay	Pay Low Wages
	Staffing	Low staff levels Work overload
	General Conditions	Good conditions ample holidays Directed study (MDP, CDP)
RELATIONSHIPS	Support	Supportive supervisors Unsupportive Superiors
	Atmosphere	Keen colleagues Respect of colleagues Negative people
	Supervisors	Real Leaders Quality supervisors (competent)
	Politics	Ambition obsessed Senior Managers Office politics

The initial categories all fitted readily into the five motivational dependent variables factors identified by the factor analysis. As both the quantitative and the qualitative findings are in agreement this further supports the five factor model.

CONCLUSION

This chapter presented the findings of the quantitative and the qualitative data from the research questionnaire. The chapter opened with a description of the demographics of the officers who responded to the survey. It noted that of the 960 officers in the region 484 responded. This was a pleasing response and provided a sample group large enough to provide data that can be analysed

statistically. Descriptive tables showed the frequency of responses for the demographic groups which were: sex, age, tenure, rank and education level. This section also included tables detailing responses to direct questions about motivation and de-motivation. These items demonstrated an overall positive motivation towards work. On a Likert scale of 1 to 5 where 1 represented strong disagreement with the statement and 5 represented strong agreement the mean response for the positive statements about workplace motivation was 3.53 whilst the mean response for a statement expressing job demotivation was 2.62. Similarly when asked to articulate their current state of workplace motivation with 1 being the lowest and 5 the highest officers provided a mean response of 3.70.

Factor analysis yielded five clear Prime Motivational Factors namely: *Feeling Valued, Achievement, Pay and Conditions, the Work Itself and Workplace Relationships*. Alpha coefficients for the internal reliability of these Prime Motivational Factors were all acceptable and were: .906 for *Feeling Valued*, .846 for *Achievement*, .782 for the *Work Itself*, .812 for *Relationships* and .750 for *Pay and Conditions*.

MANOVAs were performed to explore differences between groups within independent demographic variables and the Prime Motivational Factors. These were examined further with one way ANOVAs. Some between group comparisons by one way ANOVAs demonstrated significant variance as was the case with males and females where significant variance was found on all Prime Motivational Factors. MANOVAs and ANOVAs revealed significant variance between the Prime Motivational Factors and demographic variables as well as between groups within the demographic variables in some cases. The MANOVA

for the independent demographic variable of Age was significant for all Prime Motivational Factors whereas the demographic variable of Sex was only significant for the Prime Motivational Variables of: *Feeling Valued*, *Achievement* and the *Work Itself* and not for *Relationships* or *Pay and Conditions*.

Multiple regression analysis demonstrated that the demographic variable that had the greatest impact all five of the Prime Motivational Factors; namely *Feeling Valued*, *Achievement*, the *Work Itself*, *Work Relationships* and *Pay and Conditions* is tenure. The one Prime Motivational Factor that is an exception is *Pay and Conditions* which is impacted more strongly by the demographic of rank than any other independent variable. This is a significant finding for the discussion on whether motivation is influenced by generational cohort or by age. This significance will be discussed in more depth in the next chapter. The key demographic variables and their Standardised Beta Coefficients are:

For <i>Feeling Valued</i> ,	tenure	(.281)
For <i>Achievement</i> ,	tenure	(.158)
For <i>Pay and Conditions</i> ,	tenure	(.233)
For <i>Work Itself</i>	tenure	(.168)
For <i>Relationships</i>	tenure	(.217)

The qualitative comments were analysed and codified. An original 53 elements were recognised and this was condensed to 16 key categories. It was noted that each of these 16 categories aligned with one of the Prime Motivational

Factors. This was further support for the five Prime Motivational Factor model which was a result of the factorial analysis. It was significant that there were no sub-factors which could not align with the Prime Motivational Factors.

The next chapter will discuss what these results can contribute to the answers to this study's research questions. The results will be discussed by comparison with other research in the field as explained in the review of literature.

CHAPTER 6

DISCUSSION

The obscure we eventually see. The completely obvious,
it seems takes a little longer - Edward R. Murrow

INTRODUCTION

This chapter discusses the results presented in chapter 4 with reference to the research questions for this study. The research questions are:

- (1) What do police officers perceive as the sources of motivation in their workplace?
- (2) How do perceptions of the sources of motivation vary between different subgroups of police according to: Years of police experience; Age, Rank; Gender; and Highest educational attainment?
- (3) Do the sources of workplace motivation vary significantly between the generational cohorts?
- (4) What are the implications for the QPS?

The chapter also discusses the instrument used in this study and how it may be further refined for future research and measurement of police motivation.

Across industries and cultures organisations increasingly realise the benefits of

motivated employees (Oshagbemi, 2003). Service industries like the public service, police and other emergency services are especially reliant on employee motivation levels (Beck, 1999; Holden, 1980; Chiou, 2003; Brunetto and Farr-Wharton, 2003). The answers to these research questions are intended to assist police managers to lead their staff in a manner that maximises the motivation of police officers to perform good work. Ultimately the Queensland public will be the beneficiaries of a more active, highly motivated police service.

OVERVIEW AND MODEL

Contained within the questionnaire were 11 questions designed to measure general levels of current job satisfaction or dissatisfaction. Unlike the majority of questions which measured the motivation from specific sub-factors these questions were not directed to any particular source of motivation. Five questions asked officers to express their agreement or disagreement on a Likert scale of one to five to positive statements reflecting job satisfaction and motivation. Another five questions sought a similar Likert scale response to the negative statements expressing de-motivation. The statements and their mean scores are expressed in the table below.

Table 27 Comparison of general Motivation and De-motivation levels

Motivated Statement	Mean	De-motivated Statement	Mean
Generally, I am satisfied with my job.	3.67	I complain about my job.	2.8
I like the kind of work I am doing.	3.97	I am considering looking for a job outside the Dept.	2.56
I look forward to going to work each day.	3.43	I am embarrassed to talk with others about my job.	2.37
I feel my job is meaningful.	3.71	I am always exhausted when I come home from work.	3.01
I am encouraged to pursue self-fulfillment in my job.	2.86	I don't like atmosphere in my workplace.	2.38
Total	3.53		2.62

As the value three is the neutral point on a Likert scale of one to five all means above three express agreement with the statement. It is noted that all positive statements except "I am encouraged to pursue self-fulfillment in my job" scored mean responses above three. Overall, then police felt positively motivated in their work. The importance of this criterion was also reflected in qualitative comments made by officers in response to opened ended questions at the conclusion of the questionnaire. Twenty two officers commented that a sense of personal achievement was a strong motivator for them. Four officers also commented that a lack of adequate relevant training was a de-motivator. Both training provided and personal achievement relate to whether officers are encouraged to pursue self fulfillment in work.

The statement “I feel my job is meaningful” on the other hand drew a positive mean response of 3.71 from officers. Finding the job meaningful could prima facie appear to relate to the self-fulfillment statement. The two statements appear to have been interpreted to have very different meanings. Finding the job meaningful represents a statement about intrinsic motivation; the individual and personal meaning officers extract from their work. This is strongly supported by the number of qualitative comments relating to positive work outcomes as a motivator (five officers), motivation from helping and supporting other police (12 officers), helping victims of crime (17 officers) and making a difference-contributing to society (14 officers). The statement regarding encouragement to pursue self-fulfillment on the other hand is not worded as an expression of intrinsic motivation but of extrinsic motivation provided by the Service in the form of opportunities for self development.

The respective mean for de-motivation was scored from the negative statements at a mean of 2.62. This is not the inverse of the mean for motivation which is 3.53. This is as observed by Herzberg, Mausner and Synderman (1959), motivating factors and de-motivating factors are not the corollary of each other and the presence of one does not mean the exclusion of the other. Herzberg et al. posited that both Motivators (motivating factors) and Hygiene factors (de-motivators) were not reciprocal or hierarchical but were independent and thus could coexist. The present study illustrates this point.

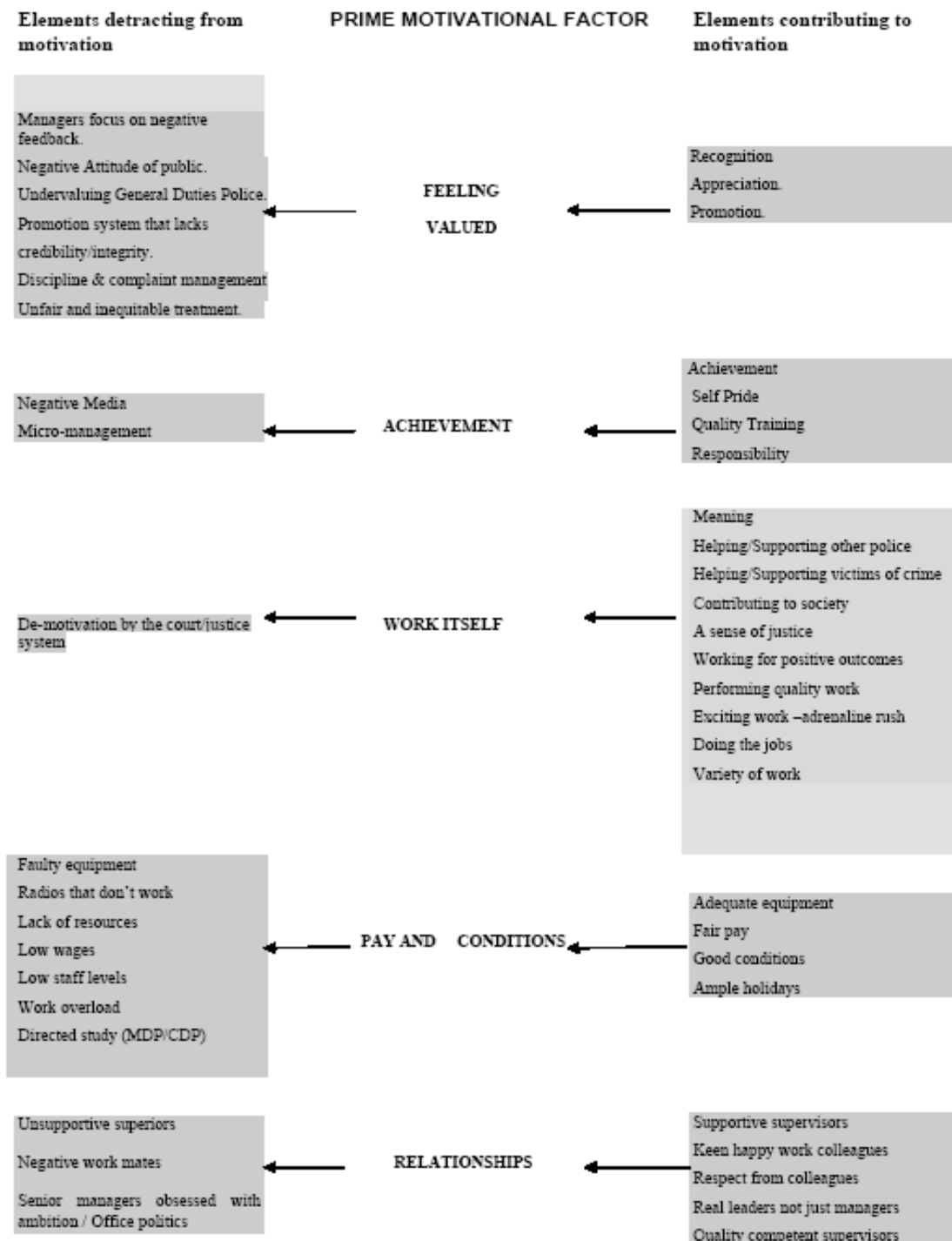
Officers were also asked to estimate their general level of motivation and indicate that level on a Likert scale of one to five, where one represented minimum and five maximum motivation. The overall mean for this response was 3.70.

Again this indicates an overall positive motivation towards the work and is consistent with the results of the five questions exploring motivation levels and the five questions exploring levels of de-motivation as discussed above.

When Principle Component Analysis was applied to responses to all questions the data separated into five clear and relatively clean Prime Motivation Factors. Themes were identified for each of these five Prime Motivation Factors. They were labelled according to these themes as, *Feeling Valued*, *Achievement*, *Work Itself*, *Pay and Conditions* and *Relationships*. A reliability coefficient was run for the items in each Prime Motivation Factor above .3 and the result was a Cronbach's alpha coefficient of .906 for column one (*Feeling Valued*), .846 for column two (*Achievement*), .782 for column three (*Work Itself*), .812 for column four (*Relationships*) and .750 for column five (*Pay and Equipment*). These categories therefore demonstrate internal reliability.

This five Prime Motivation Factor model was further validated by the results of analysis of qualitative comments made by officers. The comments were analysed and elements sorted and coded into categories and sub-factors. These sub-factors each clearly aligned with one of the Prime Motivation Factors. In this way the Prime Motivation Factors were able to include all the qualitative comments. This alignment between the qualitative data and the Prime Motivation Factors further validates the model. The sub-factors identified during analysis of the qualitative data provide detail to the model. The resultant five factor model is demonstrated on the following page.

Figure 22. PRIME MOTIVATIONAL FACTOR MODEL



Factor analysis of the questionnaire items provided a clean and clear identification of the Prime Motivational Factors influencing police in Brisbane's Metropolitan North Region. From qualitative data, comments made by police officers supported the factors identified by through analysis but went further by providing a more complete picture of how officers felt about these factors and which elements were most important. The following discussion highlights some of the typical statements made by responding officers.

FEELING VALUED

A sense of recognition of effort and for work done is one of the primary elements that contributes to an officer feeling valued. This was reflected typically by statements like the ones below.

The thing that most motivates me to do good work in my job is participating in the team effort that has a good result. Another is a boss that is competent and recognises staff over personal advancement. (Sergeant – 18 years of service)

The thing that most motivates me to do good work in my job is simply the personal recognition that I may get from superiors and support that I am doing a good job and effectively contributing to the organisational outcomes. (Senior Sergeant – 24 years service.)

I am motivated by recognition of good work. (Senior Constable – 10 years)

The thing that most motivates me to do good work in my job is appreciation from senior members for good work that has been performed. (Constable – 2 years)

Being recognised as a good worker by peers/superiors. (Sergeant - 14 years)

The negative corollary of this statement was:

Senior management fails to produce the modern management techniques taught by MDP. Very frustrating to consider how well the topic was covered. Further political machinations with the deputy spot coming up has caused no end of grief as A/Cs do back flips to get promoted. THAT ANNOYS ME! - Sergeant 18 years service.

My current job is in an environment that is very stressful with great responsibility and great demands. However, there is little if any recognition of efforts, demand on my time is great and I am unable to find a good work/home life balance which impacts on my family/friends relationship. (Senior Sergeant – 24 year service)

Promotion was also a key element that had both a positive and a negative effect on an officer's sense of feeling valued. The factor analysis of the quantitative data resulted in the element promotion falling in to the column of feeling valued and not the column of achievement. It appears that officer's see promotion more strongly from the extrinsic perspective of recognition by the organisation than a personal achievement. Some officers listed the prospect of promotion as an element that motivated them. Officers also frequently commented that they were de-motivated by a perception that they could never be promoted because the system either lacked integrity or favoured academics. Examples of these comments are:

Current promotional prospects de-motivate me to apply for more senior positions. It seems that the best resume writer (usually with some inside knowledge) will get the position-regardless of their ability to undertake the responsibilities of the position. Obtaining departmental qualifications quickly and with high grades (MDP) seems to have little if any effect on gaining promotion or undertaking relieving positions for that matter. After too many set backs you are almost forced to make do with current position therefore ambition is stifled in some which in turn allows the current trend to prosper (catch 22) (Sergeant - 23 years).

The thing that most motivates me to do good work in my job is the prospect of a fair promotion system that doesn't bias itself towards cronyism. (Senior Sergeant - 21 years).

It is very concerning that incompetent, inexperienced people are promoted to supervisor levels based on fabricated resumes. (Senior Constable -14 years).

Due to QPS nepotism and the fact that being without a sponsor I know I have no chance of promotion to commissioned rank regardless of my ability and experience my motivation has evaporated. I can't leave this department quickly enough. (Senior Sergeant - 22 years).

ACHIEVEMENT

Qualitative comments by officers revealed a high degree of idealism as reflected by frequent comments about "wanting to make a difference" and helping victims of crime. These comments came from all sectors not just those junior in service. Even more veteran officers who expressed disillusion with the organisation or the justice system still found motivation from the prospect of helping others. It was clear from the comments that many officers gained a sense of purpose and achievement from protecting the vulnerable, helping others in need

and bringing a sense of justice to a victim by apprehending an offender. Examples of these comments are:

The thing that most motivates me to do good work in my job is knowing that I have made someone's day better, easier and/or safer. (Sergeant - 23 years).

The same officer wrote:

I am de-motivated by a lack of trust by Commission Officers in the abilities of uniformed ranks from Constable to Sergeant, but trust us to wear a firearm. (Sergeant - 23 years).

The sense that I help people either feel safe or make better choices in life. (Constable - 9 years).

Ensuring that people are safe. (Constable – 6 years).

Doing the best I can knowing that this will aid fellow workers and the flow on effect of bringing justice to our world. I love seeing the results of stopping persons from breaking the law, knowing that we are doing a good job for all the community – but it worries me when the public are negative towards our work or actions. (Constable – 5 years).

A desire to “do the right thing” and produce the best possible products for my fellow officers and therefore the people of Queensland. (Senior Sergeant – 31 years).

The thing that most motivates me to do good work in my job is a personal sense of pride and professionalism together with a desire to protect members of the community. (Senior Sergeant – 22 years).

Self respect –potential for advancement. (Sergeant -14 years).

WORK RELATIONSHIPS

The need to be accepted by peers and be identified as a competent and professional team member was frequently articulated and was reflected in the following selection of typical comments:

The thing that motivates me the most is to be seen as a good police officer/operator by my peers. (Constable - 5 years service).

The thing that most motivates me to do good work in my job is to assist junior staff and see them motivated to do a professional job. The atmosphere and people you work with are the biggest factor. If you are in a happy and motivated station, it is infectious. (Sergeant - 18 years service).

I feel I am respected by my co-workers. I want to be seen as good at my job, someone you can rely on when the chips are down and you enjoy working with. (Constable - 4 years service).

Working in a tight team. (First year constable).

The thing that most motivates me ... is to be known as someone who is competent and can be relied upon to perform tasks to a high standard. (First Year Constable).

The thing that most motivates me to do good work in my job is that I don't want to let my workmates down. It is important to me that others think I am good at what I do. I get positive feedback and I don't want to create work for colleagues. (Senior Constable – 11 years).

The negative or de-motivating aspect of Workplace Relationships which was most frequently cited by officers was supervisors, managers and higher leaders who did not provide support for staff. Some of the comments made by officers in regard to the de-motivating effects of Workplace relationships were:

The main cause of loss of motivation is when rubbish complaints are given credence by superiors who won't stand up and say. "This is rubbish, don't waste police time". (Constable 5 years service).

The lack of understanding by senior management and the government for how hard general duties (officers) work for minimum income and with lack of equipment. (Constable - 4 years service).

Negative criticism demotivates me. (Senior Constable – 11 years service).

A 16 year service sergeant (42-50 year old) wrote:

Being surrounded by professional, focused, positive and likeminded people, both senior and junior with no white-anters or baby kissing "yes" men (smiling assassins) who have their own selfish agenda is the thing that most motivates me.

The sergeant also commented:

If you 'fall off the wagon' for whatever reason and get stalked by the 'black dog' the QPS don't know what to do with you and seem happy to forget about you. That is the last thing a person with PTSD or depression needs.

THE WORK ITSELF

Some officers made these statements to explain how for them the work itself was the main motivator.

Doing the job, helping victims and locking up criminals. (Senior Constable - 11 years).

Helping people and exciting work. (First year constable).

I am a SBPO (School based police officer) and the only thing that disappoints me is other police officer's attitude to my role i.e. they think it's a bludge. When people relieve in my role they think they can do uni. assignments, etc. But when I take it seriously I know I am impacting on people's lives and I am swamped by work. It is very stressful being conscious that I am portraying an image of the QPS in every dealing. I love my job though and I am busier now than I ever was in generals. (Senior Constable - 11 years).

PAY AND CONDITIONS

Comments were frequently written by officers in regard to the importance of pay and conditions as a workplace motivator. Most appear to demonstrate the hygiene factor aspect of de-motivation from perceived poor pay and conditions. A selection of typical comments follows:

Putting my life on the line for stupid things like not enough radios, cars, torches or staff. (Constable – 4 years service)

Both wages and equipment need to be looked at. (First Year Constable.)

The quotes above reflect a frequent complaint made in regard to *Pay and Conditions* that of inadequate equipment. Unreliable radios in particular were frequently held out as an example.

There is no motivation to perform. People who do very little still get paid the same. (Constable - 4 years).

I enjoy doing what I am doing however opportunities for advancement are limited. Other Federal departments offer better conditions doing similar work. (Senior Constable – 5 years).

I get de-motivated by the continual lack of appropriate staffing levels and also by senior executive inability to make timely decisions. Also de-motivated by continual “Trials” of equipment and procedures in the QPS. We need leaders who have the balls to make a decision for the betterment of the QPS and allow progress rather than continually stifling of progress. (Senior Sergeant – 31 years).

I’m de-motivated by repetition – not being able to easily change between departments. In 3 years I intend to work back on the streets as a shift supervisor. You often see the QPS Commissioner and Union reps publicly stating how they want more “Police on the streets”. However, I have been reliably informed (and witnessed it myself) how difficult it actually is. The person I am talking about left the job due to frustration of not being able to work back “on the streets” as a sergeant. (Sergeant – 14 years).

A number of the quotes above also reflect a common complaint about being locked inflexibly into positions and the inability to move from those positions by either upward promotion or lateral transfers.

HERZBERG AND THE PRIME MOTIVATIONAL FACTORS

The five Prime Motivational Factor model does not refer to Herzberg et al's Motivators and Hygiene factors but refers directly to those elements which officers have declared as having a motivating effect or a de-motivating effect. The intention is for the model to be a practical and useful tool for police leaders when considering motivational aspects of staff management.

When planning strategic human relations policies or day to day operations, this model can be used by leaders to maximise officer's motivation and interest in their job. It uses simple English and the impact of proposed plans of action on each of the five Prime Motivating Factors can be considered before implementation. Reference in the model to the elements that add to or that detract from the Prime Motivational Factors will assist planners to clearly understand the character of each Prime Motivational Factor.

The model also identifies the elements that require the attention of leaders planning to nurture or reinforce a particular Prime Motivational Factor in his or her area of influence. The cost of maintaining police departments is steadily rising and the citizenry expect increased productivity (Staudohar, 1975). One way of achieving this is by leaders employing strategies to increase employee officer's motivation (Staudohar, 1975). The Prime Motivational Factor model is a practical reference tool for leaders to use for this purpose.

UTILITY OF THE MODEL.

Beck's (1999) five year study of Australian and New Zealand police found that the police organisations had a unique problem with motivation that grew worse with an officer's tenure. The problems of low police motivation on one hand and increasingly high demands for an effective and accountable police service on the other have been noted in later studies (Wang, 2005; Bragg, 2003; Hart & Cotton, 2002). Hence police leaders need to effectively lead and manage in ways that increase officer's motivation. To do this it is essential that leaders understand their workers sources of motivation (Herzberg, 2003; Meyers 1964; Murphy, 2005).

The Prime Motivational Factor model provides leaders with an understanding of the prime factors that motivate police and of the elements that add to or detract from those prime factors. As such it is intended as a ready reference tool for managers to use as a standard to reference against proposed policies, strategies or orders to ensure that the proposed policies, strategies or orders tend to maximise motivation. This model is a unique planning tool for police managers in the absence of other models of motivation specific to police.

MOTIVATION ACCORDING TO DEMOGRAPHIC VARIABLES

It has been noted that work motivation and job-satisfaction research across diverse industries has failed to produce a comprehensive study of the personal correlates and in particular the influences of gender, age, tenure and rank

(Oshagbemi, 2003). Lough and Ryan (2005) note that Australian research of psychological predictors of police performance is very limited. The previous studies of American and Taiwanese police, from which the questionnaire instrument in this current study has been adapted (Holden, 1980; Chiou, 2004), used the demographics of: age, sex, tenure, rank and education as the independent variables for correlate analysis. A multivariate study using these variables made it possible to determine whether motivation levels correlate to employees overall or to specific demographic cohorts (Oshagbemi, 2003). Where particular demographic cohorts correlate with low motivation levels, this information will facilitate the creation of specific strategies by police organisations to lift the motivation levels of these target groups. The model further enables planners to identify particular motivational elements that have application to a specific target group.

AGE

The relationship between age and employee motivation is important for the QPS. Over the past 20 years the average life expectancy for males has increased six years to an average of 78 years and increased by four years for females to an average of 84 years of age (Australian Bureau of Statistics, 2006). This factor together with Australia's continuing decline in fertility is creating a community with an average age older than ever experienced before (Australian Bureau of Statistics, 2006).

The proportion of older individuals in the community is rising and whereas the number of 50 to 64 year olds in the community was 25 percent in 2000 it is expected to increase to 32 percent by 2050 (United Nations, 2007). In line with this general community aging, the QPS workforce is becoming increasingly age diverse and includes officers from the so called Generation Y, Generation X and Baby Boomers cohorts. Age limits for police entry have been steadily increasing. Currently there is no maximum age for entry (Retrieved June 26, 2008, from <http://www.police.qld.gov.au>) and recruits with previous experience over 50 years of age have been recently accepted in 1988 the maximum age was 34 years. A greater proportion of police recruits today are people who enter the academy with considerable life experience or who have already exhausted one career in another organisation like the military (Bragg, 2003). Age and tenure of career are therefore not as closely aligned as they once were but still show a Pearson correlation of .668 indicating that there is a moderate to large correlation.

Very few studies have examined the impact of age on work motivation (Huddleston, Good & Frasier, 2002; Linz, 2004; Lord, 2004). QPS managers are increasingly required to effectively manage a diverse workforce which includes police officers from 19 years of age to 60 years of age. Human resource planning within the QPS is currently seriously considering lifting the existing compulsory age retirement limit which is 60 years. It is therefore important for QPS managers to understand which Prime Motivational Factors are important for different age groups within the workforce and if in fact sources of motivation vary according to age at all.

Currently, older employees are encouraged to stay longer with the QPS and managers are faced with the challenge of maintaining work motivation in a workforce of widely disparate ages. Employees from these very different age groups may hold very different values, work ethics and motivations. Without empirical knowledge about each age group managers are simply managing on assumptions and genuine effective leadership of all employee groups is seriously fettered (Oshagbemi, 2003).

For the purposes of this study, officers were divided into three age categories. These categories align with the notions of: baby boomers and a younger and an older cohort from Generation X. Those aged from 42 to 60 years old fall within the baby boomers cohort whilst the category 25 to 33 years old fits within the younger Generation X and the category 34 to 41 years old is the older Generation X category.

Most research studies have demonstrated some level of correlation between work motivation and age (Oshagbemi, 2003). As far back as 1970 (Gibson & Klein) found that overall job motivation increased with age, independent of tenure. More recent studies however, (Kanfer, 2000) have shown a negative correlation between motivation and age. The following discussion discusses the impact of age on each of the five Prime Motivational Factors.

AGE AND FEELING VALUED

The Prime Motivational Factor of Feeling Valued emerged statistically as the factor with the most robust reliability of all the five factors with an alpha coefficient of .906. At the $p < .05$ level the Prime Motivational Factor of *Feeling*

Valued is significantly influenced by an officer's age as a significance level of .002 resulted for this MANOVA. A MANOVA test between subject effects for age and feeling valued produced a Partial Eta Squared of just .027. The Partial Eta Squared is a measure of the size or power of the effect that the independent variable exerts on the dependent variable. Greater than .14 is regarded as a large effect, from .06 to .14 is regarded as a medium effect and less than .06 is regarded as a small effect (Pallant, 2005). In this case the Partial Eta Squared of .027 indicates that Age as an independent variable has only a small general effect on the Prime Motivational Factor of *Feeling Valued*.

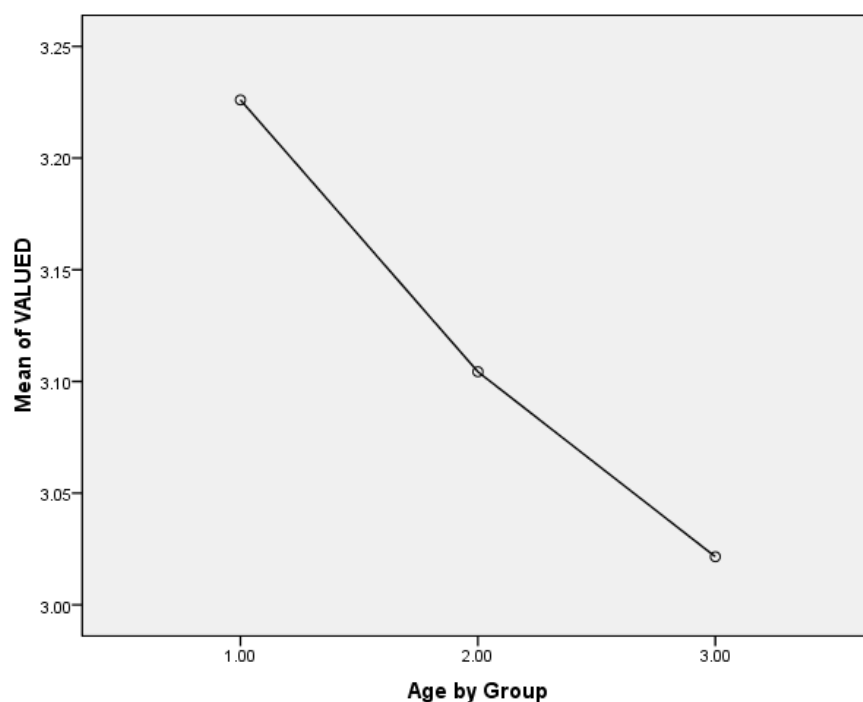
When Multiple Regression analysis was applied to determine the specific impact of a demographic variable on a Prime Motivational Factor with the influence of the other demographics taken out the result was similar. For the Prime Motivational Factor of *Feeling Valued* the standardised Beta Co-efficient for age was .048 ($p=.447$). This indicates that only 4.8 percent of the variance of the *Feeling Valued* Prime Motivational Factor is contributed by the variable age. In addition age did not show a significant relationship with the Prime Motivational Factor, *Feeling Valued*. In both cases the alpha for significance was well above .05 indicating that the results had greater than one chance in 20 of occurring by random and therefore failed to satisfy the test for statistical significance. Both the MANOVA and Multiple Regression analysis produced a consistent result; that age had only a small effect on the variable *Feeling Valued* and that the relationship was not significant.

By contrast the variable Tenure, expressed as years of service had a Standardised Beta Co-efficient of .281, which is over five times the effect that the

variable age exerted. This pattern of tenure exerting far more influence than age on police motivation has been noted by other researchers (Bragg, 2003; Beck, 1999). Similar conclusions have been reached by researchers studying other industries like the hospitality industry (Shah, Crossman & Chinmeteeptuck, 2003).

Some interesting variance was however observed between different age groups when one way ANOVAs examined the between group variance as it applied different age groups to the five Prime Motivational Factors.

Figure 23 One way ANOVA factor Feeling Valued and Age.



A general pattern that appeared across most of the between groups comparisons when ANOVAs were applied was a 'V' shape with the lowest point near the middle and the high points at the first and last groups. Significantly the

highest point of motivation is generally at the commencement of the career. Initially when Age was analysed with ANOVA before the initial seven groups were collapsed into the current three this pattern clearly appeared. It was necessary to reduce the number of groups for further statistical analysis. Other studies have noted the same pattern when measuring motivation between demographic groups. Although he did not graph the results, the tables for demographics of age, rank against job-satisfaction levels in Bragg's (2003) study of Queensland police reveal the same pattern. A study of the Job-satisfaction levels of 323 Thai hotel employees likewise revealed the same "V" pattern (Shah, Crossman & Chinmeteevituck, 2003).

In general terms this analysis showed that for the motivation levels in relation to *Feeling Valued* there was a significant difference between officers 25 to 33 years of age and officers in the age group from 42 to 60 years of age. This is consistent with Beck's (1999) finding that officers in the establishment phase of their careers are motivated by a strong sense of being accepted and valued by their peers and the organisation but motivation and commitment drop significantly during the advancement phase. The present graph of three age groups shows that motivation from feeling valued declines in an almost linear pattern as the officers age.

This general trend of decreased motivation with age seems to apply cross-culturally in other jurisdictions (Holden, 1980; Chiou, 2004). Camilleri's (2007) study of 3,400 Maltese public servants found that there was no significant relationship between age and motivation. Camilleri's study did however find a negative relationship between public servant motivation and tenure. Chiou's study

of 680 Taiwanese police officers found that there was no significant relationship between age and **positive** motivation but there was a relationship between age and de-motivation with increasing job dissatisfaction with advancing age. This is also consistent with the notion that as workers age they place less importance on intrinsic motivation like *Feeling Valued* and more on job security and income (Warr; 1997). Ekerdt and DeViney (1993) found that as workers approached a compulsory retirement age their motivation diminished and they increasingly found their work burdensome. In their study, Ekerdt and DeViney point appear to apply this point to those officers approaching early optional retirement at age 55 but not to those who choose to remain until the compulsory retirement age of 60.

It appears then that in the QPS younger officers (below 34 years) are motivated by a sense of *feeling valued* by the organisation and their peers, whereas motivation from this factor progressively decreases from the age of 34 to 60. One explanation for these results is that the younger group (under 34) has youthful enthusiasm and a desire for acceptance and approval by both the organisation and peers and so are motivated by expressions of personal value, whilst the groups from 34 years of age to 60 years of age demonstrate the motivation burn out that correlates with tenure.

Many in this group have served for years and the cumulative effect of frustrations with continuous change, slow and ineffective processes and a lack of trust in the organisation's leadership have eroded *Feeling Valued* as an effective motivator for these officers. This age group may also be preoccupied with the life stage challenges of paying off a home mortgage, surviving with a new family whilst paying maintenance for children of a previous relationship, paying for

children's high school or preparing and saving for retirement. These factors which arise at this life stage may increase the importance of *Pay and Conditions* as a motivator for this group and decrease the importance of *Feeling Valued* as suggested by Warr (1997).

The lowest level of motivation by *Feeling Valued* (mean 3.02) is from officers in the 42 to 60 year old, Baby Boomers group. This may be because the officer has decided to retire at 55 or sees no prospect of promotion or future challenge in the job and is simply "waiting it out" until reaching early retirement age at 55 or later. A high proportion of these people are commissioned officers whose qualitative comments indicate that they find the responsibility of their position motivating yet the overall motivation from Feeling Valued by Baby Boomers is still low. As the QPS continues to recruit people of older age, particularly those from previous military and other careers it may be that some of these officers are still relatively junior in tenure and have not been jaded by the same experiences as officers with longer experience.

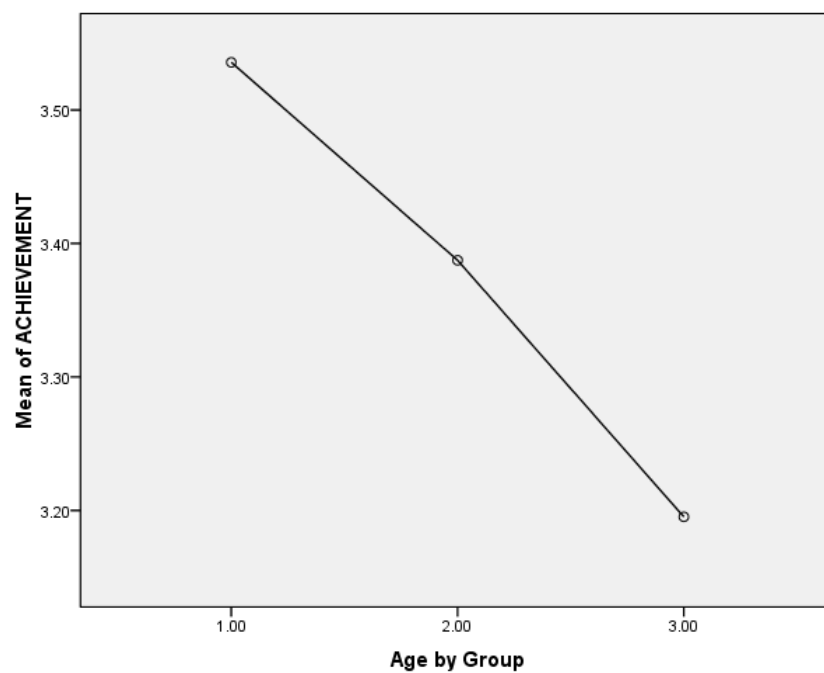
The span in recorded levels of motivation between the high for younger Generation X (25 to 33 years) at a mean of 3.1182 and the low for Baby Boomers (42-60 year olds) at a mean of 2.9243 is not large. This is not a large difference although it is statistically significant. The Partial Eta Squared is .027 indicating only a weak overall relationship. The quantitative finding that officers of all age groups are motivated by a sense of feeling valued is collaborated by responses given as qualitative comments which indicated that *Feeling Valued* was a powerful force both as a motivator, when officers were valued by supervisors and as a demotivator when officers felt that their work and efforts were not noticed or valued.

A constable in 4th year wrote:

I feel the effort that I put into my job is not noticed and there is a lot more attention placed on me for minor and insignificant errors – This demotivates me.

AGE AND ACHIEVEMENT

Figure 24 One way ANOVA factor *Achievement* and *Age*.



An in group one-way ANOVA for the Prime Motivational Factor of *Achievement* and demographic variable of *Age* showed a statistically significant variance for the factor *Achievement's* motivation between the younger generation X group (25-33 yrs) and the baby boomers group (42 to 60 yrs). A statistically significant variance

was also found between the older generation X group (34 to 59 yrs) and the baby boomers group. The lowest point on the graph is for the baby boomers group and is consistent with the general trend for age of relatively linear decreasing motivation with advancing age. This is consistent with previous studies in other industries. (Heckhausen, 1997) in Kanfer 2000, found that middle aged and older employees were less motivated by achievement than younger people. The power of impact of age on this Prime Motivational Factor however is only moderate as measured by the Eta squared of .12. Anything between .06 and .14 is regarded as a moderate effect (Cohen, 1988).

A 4th year constable wrote:

The thing that motivates me is a sense of achievement and recognition of good work and effort.

Pride is seen as an element of achievement. Self-pride is an element frequently referred to as a motivator by officers. This comment from a sergeant with 18 years experience is an example;

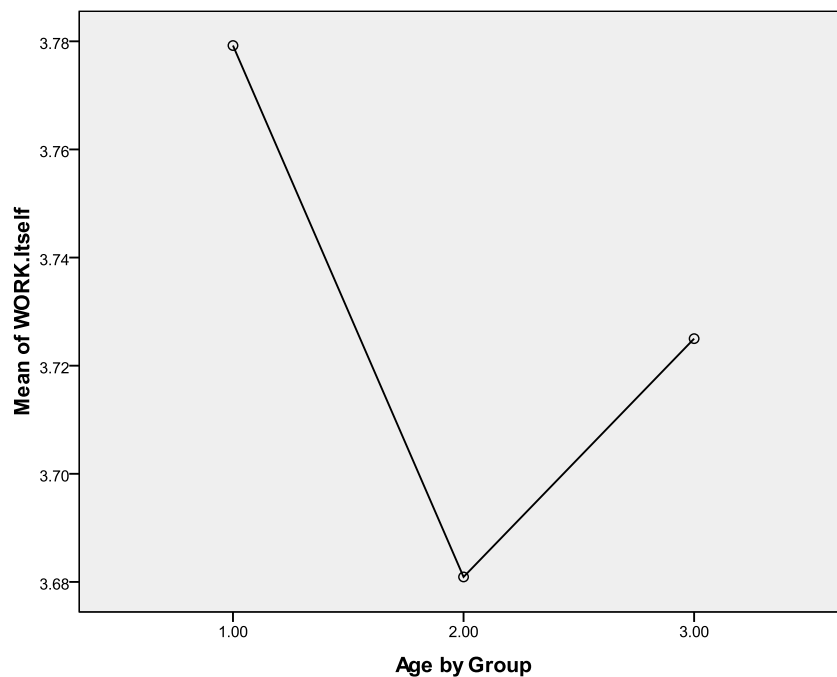
I am motivated most by pride in the quality of work I put my name to!

Another issue linked with age is physical ability, fitness and health. A number of studies have found a positive correlation between health and work achievement oriented motivation (Higgs, Mein, Hyde & Narzroo, 2003; Holahan, 1988). It is generally accepted by researchers that good health correlates

positively with motivation to achieve and self-determined extrinsic motivation and that these have a relationship to a positive perception of self (Higgs et al.; Holahan).

AGE AND THE WORK ITSELF

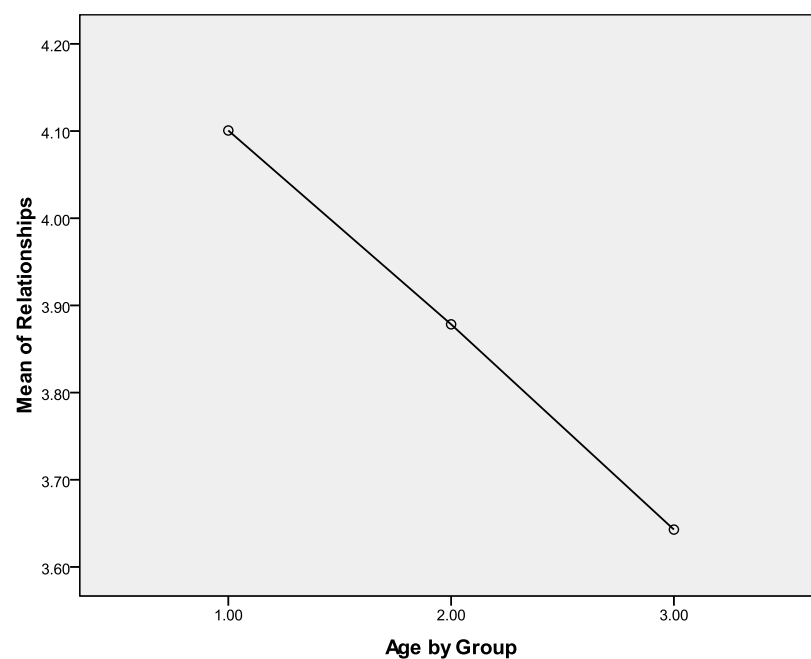
Figure 25 One way ANOVA factor *Work Itself* and *Age*.



A negative correlation was found between the *Work Itself* and age in Kanfer's (2000) study of workplace motivation. In this ANOVA even with the limitation of only three age groups the familiar V pattern appeared with the highest levels of motivation for the younger Generation X group and the lowest level for the older generation X group, in the middle.

The effect size of Eta squared was .07. This indicates that age had only a small effect on the Prime Motivational Factor, *Work Itself*. The means for the groups were close and ranged from 3.681 to 3.78. This difference was not statistically significant. It is therefore concluded that for police in Metropolitan North Region, age is not an important factor in determining the motivation police receive from performing the work itself. Although there is little variance in motivation levels from the nature of work itself this data does not explain whether different aspects of the work have greater effect on people of different ages. Tenure and rank have more influence here than age (Beck, 1999; Bragg, 2003).

FIGURE 26 AGE AND WORKPLACE RELATIONSHIPS



A key element, that both the quantitative data as well as the qualitative data identified as a component of the Prime Motivational Factor of *Workplace Relationships*, is supportive supervisors. Other studies of police have produced

similar results (Otis & Pelletier, 2005; Bragg, 2003). Otis and Pelletier conducted research with a sample of 122 Canadian police officers. They found that where the officers perceived their immediate supervisor as highly supportive of their autonomy the officers had higher levels of motivation. The officers who perceived that their immediate supervisors were supportive had higher levels of motivation in regard to their future work intentions and reported lower levels of everyday problems associated with work (Otis and Pelletier).

This study showed a statistically significant relationship between age groups and the Prime Motivational Factor of Work Relationships for all three age groups. The strength of the relationships was only weak to moderate. The strength of the relationship as measured by the Eta squared was .073 where .06 to .14 represents a medium influence. This ANOVA resulted in an almost linear pattern demonstrating consistent and continuous decline in motivation with increasing age. Although the differences between age groups were significant they were not large. The means for the three groups ranged from 4.1 for the younger Generation X group to 3.64 for the Baby Boomer's group.

Why *Workplace Relationships* becomes less effective as a motivator with advancing age is not clear. It may be a combination of factors like the influence of tenure, rank attained by that age or life stage influences external to the organisation and the work. At the age of 34 to 41 years officers may place increased importance on the home mortgage, children's schooling and activities external to workplace relationships. A number of researchers have researched specific elements that motivate older workers in the workplace. These elements include: enjoy the work, enjoy using skills, a sense of accomplishment, a chance to

be creative (Lord, 2004), financial reasons, the work itself, work ethic (Higgs, Mein, Ferrie, Hyde & Narzroo, 2003) and better physical conditions (Leviatan, 1992). It is noted that none of these studies identified workplace relationships as a key motivator for older workers.

A Canadian study of Work/Canada 2006/2007 demonstrated that clear communication between supervisor and employee was part of a relationship that positively motivated employees of all age groups (Canadian HR Reporter, 2007). The following qualitative comments from officers illustrate the motivating effect of workplace relations with both the organisation and fellow employees across different age groups.

A 16 year sergeant (42-50 yr old) wrote:

Being surrounded by professional focused, positive and likeminded people, both senior and junior with no white-anters or baby kissing “ yes” men (smiling assassins) who have their own selfish agenda is the thing that most motivates me.

The sergeant also commented:

If you ‘fall off the wagon’ for whatever reason and get stalked by the ‘black dog’ the QPS don’t know what to do with you and seem happy to forget about you. That is the last thing a person with PTSD or depression needs.

A senior sergeant over 55 years of age and with almost 30 years experience wrote:

I am motivated most by recognition of what I am doing as being of benefit to the department in achieving its stated goal.

The Senior Sergeant added the general comment that;

I believe it is important for senior management to have an awareness of the difficulties and frustrations that may be experienced by their staff and support them by implementing procedures designed to reduce adverse impacts. Management must be seen to be supportive of their subordinate staff. Honesty in personal relationships is vital.

Another senior sergeant in the 34-41 year old group and with 18 years experience wrote that;

The thing that motivates me the most is pride in the quality of work I put my name to.

The senior sergeant responded to the invitation to make open comment with:

Motivation comes from being part of a committed work team – who get on well professionally and socially.

A constable (34-41 yrs) in his fourth year wrote:

The thing that motivates me the most is a sense of achievement and recognition of good work and effort.

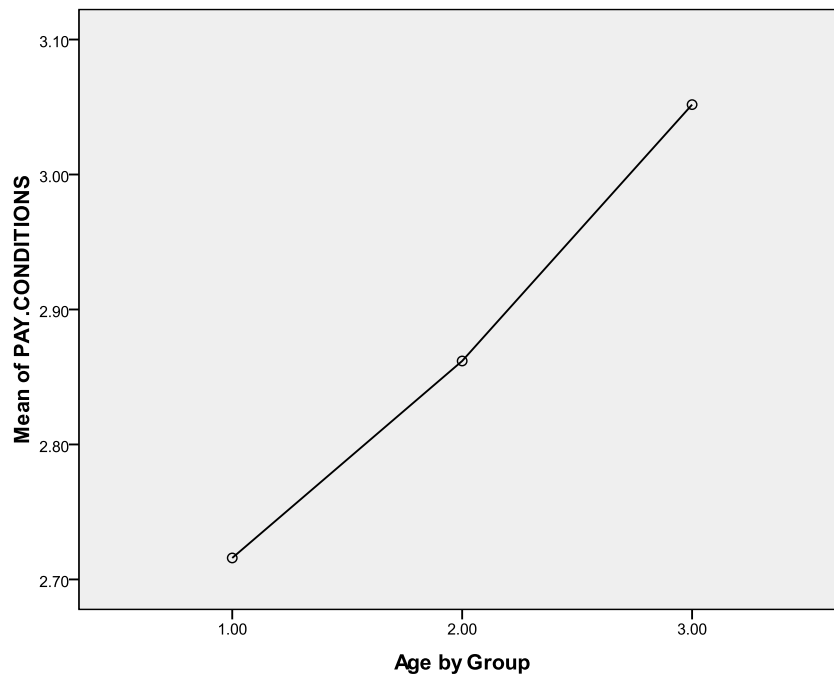
As a response to the invitation to make any other comment the constable added:

I feel the effort that I put into my job is not noticed and there is a lot more attention placed on me for minor and insignificant errors – This demotivates me.

A Senior Sergeant with 18 years experience wrote that:

Motivation comes from being part of a committed work team – who get on well professionally and socially.

Overall age has been shown to exert a statistically significant effect on motivation from workplace relationships but the variance between different age groups is small with limited power of effect and does not justify further exploration.

*AGE AND PAY AND CONDITIONS**Figure 27 One way ANOVA factor Pay & Conditions and Age*

Although there is very little research which has examined the relationship between age and workplace motivation the research that has been done has shown that age has a moderating influence on the relationship between work characteristics and the motivation to work (Kooij, Lange, Jansen & Dikkers, 2008). Thus as workers age the influences of the workplace according to Kooij, et al., generally reduce their capacity to be motivated. The motivational effects of key aspects of the job at different ages were summarised from available empirical literature by Warr (1997) who concluded that as workers age they place less importance on high job demands, job variety and feedback and more importance on job security and physical security. Other researchers (Ekerdt & DeViney, 1993)

found that as workers age and approach a fixed retirement age their attitude and consequent motivation towards their jobs change as they increasingly see their jobs as burdens whilst their interest in and identification with the job and the organisation gradually diminish. The QPS has a fixed retirement age of 60 years for police although some police have the option of early retirement at 55. The results of the current study support some of these assertions and not others. Although the findings of this research generally do not support the notion of a continuous decline in motivation with advancing age, they do show a general tendency for motivation to reduce until the age of 55 where those who choose to remain appear to be either a more motivated or re-motivated cohort.

Lang and Carstensen (2002) found that as staff age they are more likely to be motivated to support and develop other staff. Thus older staff members are more likely to be motivated by opportunities to train, mentor and assist the development of other staff. Kooij (2008) found that workplace perceptions of older workers pressured them to retire, decreased their likelihood of promotion or of having highly positive evaluations or opportunities for training and development. The combined result of these pressures was a lowering of work motivation and a reduction in the motivation to continue work.

Some authorities (Deal, 2007) argue that different working generations are not marked by differing values and motivations, but essentially value the same things. Deal advocates the need for leaders to learn how to use this “common ground” to “attract, manage, retain and develop employees of all generations.”

Comments made by police tend to identify pay and conditions as a hygiene factor, and in terms of the de-motivation experienced from poor conditions and

inadequate pay. These comments were consistent across all age groups. The following are some qualitative comments that illustrate.

A policewoman (25-33 years old) with 5 years experience wrote:

I enjoy doing what I am doing however opportunities for advancement are limited and other Federal departments offer better conditions doing similar work.

A policeman with 31 years experience (42-50) commented that he was most motivated by:

A desire to 'do the right thing' and produce the best possible products for my fellow officers and therefore the people of Queensland.

The invitation for open comment drew this comment:

I become de-motivated by continual lack of appropriate staffing levels and also by senior executive inability to enable timely decisions. Also, de-motivated by continual "Trials" of equipment and procedures in the QPS. We need leaders who have the balls to make a decision for the betterment of QPS and allow progress rather than continually stifling progress.

A sergeant 14 years (34-41) wrote that he was:

Motivated most by self respect- potential for advancement, being recognised as a good worker by peers/superiors. But the wage needs increasing. Repetition – (is a de-motivator) not being able to easily change between departments. In 3 years I intend to work back on the street as a shift supervisor. You often see the QPS Commissioner and Union Reps publicly stating how they want more 'police on the streets' however, I have been reliably informed (and seen it myself) how difficult it actually is. The person I am talking about left the job due to frustration of not being able to work back on the street as a sergeant.

A sergeant (42-60) with 30 years experience wrote:

I have 30 years in the QPS and my children are all but receiving the same money as I am and they don't do night work every 5 weeks.

A one way ANOVA of Age and *Pay and Conditions* revealed that there was a statistically significant variance between each of the three age groups at .05. There was a moderate range in mean scores where the means for the groups ranged from 2.72 for Younger Generation X (25-33 yrs) to a mean score of 3.02 for Baby Boomers (42-60 yrs). In contrast to the other Prime Motivational Factors for Age motivation from *Pay and Conditions* increases with increasing age and followed an almost linear pattern. The strength of the relationship as measured by Partial Eta Squared is .029 indicating that differences in age exerts a moderately power of influence on motivation from *Pay and Condition*

This is very different from the other Prime Motivational Factors and may reflect the fact that many police who choose to remain after 55 years of age are those who are generally happier in the job, have attained higher rank or may have chosen to remain for financial reasons. Murphy's (2005) study of 713 Australian police indicated that a significant reason for baby boomers to pursue promotion or to remain beyond retirement age was to enhance their pensions. The financial reasons for this may be that they still have dependent children, are still paying off a mortgage or are endeavouring to increase their superannuation before retiring at 60. It has been found that financial reasons are the predominant influence on an officer's decision to remain employed by the QPS until 60 years of age instead of choosing retirement at 55 years (Marcus, 2008).

In 2001 Brunetto and Farr-Wharton found that Australian police officers are dissatisfied and de-motivated by a number of their working conditions. The study concluded that this de-motivation was contributed to by the tremendous organisational changes that have been imposed on police

since the 1990s. Brunetto and Farr-Wharton (2001) suggested that this demotivation would likely weaken the effectiveness and efficiency of police organisations. If this is the case it would appear that since 2001 there has been an acceptance of these organisational changes as the current research shows that motivation from *Pay and Conditions* steadily increases from 33 years of age onwards. It is thus the younger police who have not experienced the changes from the old police organisation and culture who are least motivated by *Pay and Conditions* and more motivated by other PMFs like the *Work Itself* and *Workplace Relationships*.

OVERALL IMPACT OF AGE ON THE PRIME MOTIVATING FACTORS

The sense of feeling valued by the organisation is not greatly affected by the officer's age. Eta squared and multiple regression analysis showed that Age exerted only weak influence on the Prime Motivational Factors. The current study is consistent with earlier research that found that as workers aged their motivation generally diminished (Ekerdt & DeViney, 1993) and that they place less importance on motivation from intrinsic sources and greater importance on *Pay and Conditions* (Warr, 1997). This was also the general result in this study.

There was a statistically significant but weak relationship between age and the Prime Motivational Factor *Achievement*. Similarly age was not an important factor in regards to motivation from the *Work Itself* as this factor influenced police across all age groups. Work Itself followed the classic V pattern with the lowest motivation for the older Generation X group (34-42 yrs). The relationships between groups for the Prime Motivational Factor *Work Itself* were statistically significant but have only a weak influence with a Partial Eta Squared of .07. The Prime Motivational Factor, *Workplace Relationships* showed a statistically

significant relationship between age groups but only of very moderate influence (Eta Squared .06). As with the Prime Motivational Factor *Feeling Valued* and *Achievement*, *Work Relationships* demonstrated a linear decline in motivation as the officers grow older. *Work Relationships* is most effective as a motivator for the Younger Generation X and like the previous two Prime Motivational Factors has less effect as a motivator as the officer ages. Although statistically significant *Workplace Relationships* was only responsible for about eight percent of the difference between age groups and so has a relatively consistent but small to moderate effect as a motivator regardless of age. Quantitative comments consistently make reference to the importance of being respected by peers and accepted as a team member. These comments reinforce the importance of good workplace relationships for police generally but especially for those under 42 years of age who most frequently made these comments.

The Prime Motivational Factor, *Pay and Conditions* is uniquely influenced by the variable age in that it is the only Prime Motivational Factor that continuously increases its motivational effect after the age of 25 years. *Pay and Conditions* as a Prime Motivator continuously increases from the age of 25 years. The increase is close to linear. It has been suggested that a change in lifestyle where health and lifestyle is more important is part of the explanation for this as is the perceived need to take advantage of the last opportunity to save before retirement.

The only Prime Motivational Factor that resulted in a classic “V” pattern for Age was *Work Itself*. This was an exception and as there were only three age groups this pattern was not expected. It may be due to a combination of factors

including the retirement of dissatisfied and disgruntled officers at 55 years of age and that those remaining have increased satisfaction from their conscious decision to remain; the so called “Every day is Chooseday” effect. This may indicate the benefits of retaining an early retirement option that allows officers who are no longer motivated and simply “waiting it out” to retire with some benefits and move on to new areas in their lives and reduce negativity in the QPS environment. As the general population continues to age the QPS will be increasingly faced with an aging workforce and whilst motivation of all age groups is important, motivation and retention of older experienced officers has special significance. This research shows that for younger officers below the age of 42 years *Workplace Relationships* is a significant motivator whereas for officers aged over 55, pay and conditions are paramount. This information can be used to tailor motivational policies and incentives to officers in specific age groups.

Holden’s (1980) study of Houston police found that there was no significant relationship between age and officer motivation. The only relationship which he found was a weak one which was borderline for statistical significance ($p = .05$) between age and motivation from advancement. Chiou conducted research with 680 Taiwanese police officers in 2004 and failed to find any statistically significant relationship between work motivation and age. These studies supported earlier findings (Mottaz, 1987) that there was no significant relationship between job motivation and the demographic variable age.

GENDER

Research to explore the relationship between gender and motivation has yielded contradictory results (DeSantis & Durst, 1996; Oshagbemi, 2003, Bragg, 2003). A number of studies have found women to be more motivated than men whilst other studies have shown the reverse (Oshagbemi). In the present research the MANOVA when set at the bonoferroni adjustment at a higher standard of significance of .01 identified that police women had slightly higher levels of motivation than police men for two Prime Motivational Factors. These Prime Motivational Factors are *Feeling Value* and *Achievement*. When the lower level test of significance was set at .05, police women were also found to have a statistically significant, slightly higher level of motivation than police men for two other Prime Motivational Factors *Work Itself* and *Workplace Relationships*. The effect size of these two as measured by Partial Eta Squared indicated very weak effects in both cases *Work Itself* (.009) and *Workplace Relationships* (.008). For this reason these two Prime Motivational Factors will not be further discussed and the following discussion will focus on the two Prime Motivational Factors with higher levels of significance *Feeling Valued* and *Achievement*.

Table 28 Gender and motivation from Feeling Valued and Achievement

Prime Motivational Factor	Mean of Motivation		Significance	Partial Eta Squared	Beta value
	Male	Female			
<i>Feeling Valued</i>	3.085	3.273	.000	.029	.092
<i>Achievement</i>	3.316	3.556	.000	.027	.072

MANOVA analysis revealed statistically significant relationships at the Bonoferroni adjusted figure of .01 between Gender and the Prime Motivational Factors of *Feeling Valued* (.000) and *Achievement* (.000). The effect size for these two Prime Motivational Factors is small as *Feeling Valued* had a Partial Eta Squared value of .036 and *Achievement* had a Partial Eta Squared value of .027. Partial Eta Squared values less than .06 are regarded as indicating a small effect size (Cohen, 1988). The contribution of each demographic variable to the motivation from *Feeling Valued* and *Achievement* was analysed using multiple regression. The analysis indicated that the relationship between gender and *Feeling Valued* was statistically significant ($<.001$) but that the relationship between gender and *Achievement* was not (.152). The Beta value for *Feeling Valued* was .092 indicating that gender is only a predictor for 9.2% of the variance within the factor *Feeling Valued*. Similarly the Beta value for *Achievement* was .072 indicating that gender is a predictor for only 7.2% of the variance within *Achievement*. By contrast, Tenure was the independent variable with the strongest influence and with a Beta value of .281 was a predictor of 28.1% of the variance within *Feeling Valued* and at a Beta value of .158 was a predictor for 15.8% of the variance within *Achievement*. From these findings it is concluded that gender has a statistically significant relationship to the Prime Motivational Factors of *Feeling Valued* and *Achievement* indicating that police women are slightly more motivated by these factors than police men. The predictive power and effect size of gender on these factors however is weak in regards to the workplace motivation of police in Metropolitan North Region.

These findings are consistent with earlier research conducted with 246 police respondents in Metropolitan South Region (Bragg, 2003). In the study of Bragg (2003) it was found that there were negligible differences between gender for motivation caused by the *Work Itself, Pay and Conditions* or for *Workplace Relationships*. Bragg (2003) did find however a statistically significant difference in the mean scores for motivation by promotion where female officers reported a higher level of satisfaction with promotions. Bragg (1998) found in an earlier study that promotion was the only variable that showed a statistically significant relationship to gender. In respect to the findings from his two studies of Queensland police Bragg commented that there is no apparent explanation why female officers are more satisfied with promotions. Bragg (2003) suggested three interrelated factors that may serve to explain this higher level of motivation of female officers, namely a positive perception of affirmative action policies or a possible female advantage as an E.E.O promotional target, because female officers are more youthful as a group than their male counterparts and because female officers may consider QPS policies are fair and more rewarding than those in other departments and agencies. Campbell, Converse and Rogers (1976) attempted to explain the higher job-satisfaction levels of women by the lower expectations women have of jobs. Another argument that was offered to explain this is that as women's conditions, remuneration and general expectancy are still less than men's and women are generally more satisfied with their achievements and thus more motivated (Oshagbemi, 2003).

A South African study of 1,453 police recruits indicated that female recruits arrived for training with stronger attitudes in support of police culture, solidarity, isolation and cynicism than male recruits (Steyn, 2006). Whether police

women in other cultures also share a stronger identification with the police culture than police men remains to be researched but is a possible explanation for the higher levels of motivation. There were negligible difference in motivational levels of men and women due to perceptions of workplace fairness (Oshagbemi, 2003). In contrast, research from South Africa (Mwamwenda, 1997), Japan (Ninomiya & Okato, 1990) and Germany (Lissmann & Gigerich, 1990) has demonstrated a general trend for male teachers to express a slightly higher level of job-satisfaction. Additionally, an Australian study of white-collar construction workers found no statistically significant difference between total levels of motivation and de-motivation for males and females (Gilbert & Walker, 2001).

Furthermore, a study of Taiwan police showed no significant difference between the motivation levels of male and female officers (Chiou, 2004). This finding was consistent with earlier studies of U.S. police officers (Dantzker & Kubin, 1998). Kanfer (2000) noted that women reported significantly higher levels of motivation and satisfaction from the work itself than did men. In the same study middle-aged women were found to have the lowest levels of motivation by the achievement factor. Camilleri (2007) noted that in a study of 10,000 US federal public servants motivation scores were slightly higher for women than men.

In the first stage of her study of Queensland police turnover, Drew (2003) surveyed 560 police and found no evidence to predict turnover as a function of gender. Turnover intention is inversely related to workplace motivation (Herzberg, Mausner & Synderman, 1959; Drew; Bragg 2003; Marcus 2007). A very recent study of 4,880 New Zealand respondents to a survey show no

significant difference between male and female police officer's levels of motivation (Featherstone, 2008). These studies are consistent with the finding in the current study that there was, at best only tenuous relationships between gender and specific Prime Motivational Factors and no significant relationship between gender and overall police workplace motivation.

The findings of the present study are consistent with the trend of international and national police research, that there is an indication that police women may be slightly more motivated than police men in respect to motivating factors like *Feeling Valued* and *Achievement* but that the degree of difference between the two genders is very small and the effect of the difference is also small. There is no apparent reason for the difference and most studies simply offer speculation. This could be an area for investigation by further research.

TENURE

Tenure is a key factor impacting on the effective management of police organisations as it involves concepts of job commitment and the retention of staff with valuable skills. In this study a comparison of the impact of tenure and age on police motivation may assist to explain the relevance of Generational Cohorts to police motivation. The range of respondent tenures was measured in years of police service from one to forty-six years. The responses to the survey were then categorised into seven groups according to the number of years of service. The categories were: Group 1: 2 years or less; Group 2: 3 to 4 years; Group 3: 6 to 8 years; Group 4: 9 to 13 years; Group 5: 14 to 18 years; Group 6:

19 to 24 years and Group 7: 25 years and more. When the relationship between the Tenure and the Prime Motivational Factors was explored with MANOVA a statistically significant relationship was found between each of the five Prime Motivational Factors and Tenure.

Previously, studies of Australian and New Zealand police demonstrated that commitment and motivation decrease as tenure increases (Beck, 1999). Camilleri's study (2007) of 3,400 Maltese public servants found a negative relationship between public servant motivation and tenure. Bragg's research (2003) of Queensland police found statistically significant relationships between work-satisfaction and the *Work Itself*, promotions and relationships with co-workers. Significantly, Bragg's study (2003) found that police job-satisfaction peaked in the first two years of service and continued to decline after that. Beck (1999) made similar observations that police constables rapidly lost motivation after only nine weeks of service. The present study presents similar findings where for most Prime Motivational Factors motivation is highest in the first year and rapidly declines after that.

When MANOVA was performed in this study a statistically significant relationship between each of the tenure groups and each of the Prime Motivational Factors was shown. Use of Partial Eta squared revealed a effect size (.155) for tenure on the Prime Motivational Factor, *Feeling Valued*. Similar medium effect sizes were shown by the Partial Eta Squared for the factors; *Achievement* (.063), *Work Itself* (.084), *Workplace Relationships* (.085) and *Pay and Conditions* (.113). The application of multiple regression to evaluate the effect of each of the demographic variables (except Rank) on each of the Prime Motivational Factors

independent of the other demographic variables resulted in a finding that tenure had a greater influence on each of the Prime Motivational Factors than any of the other demographic variables. In every case Tenure was an independent variable that had the greatest Beta value and that value was usually twice the size of the next highest variable. When multiple regression was used to explore the influence of each independent variables (except Rank) on the Prime Motivational Factor *Feeling Valued* the highest Beta value was for Tenure (.233) which accounted for 23.3% of the variance in the Prime Motivational Factor *Feeling Valued*. The next highest Beta value (.061) was for sex which accounted for 6.01% of the variance in the Prime Motivational Factor *Feeling Valued*. The pattern was similar for the other independent variables and is set out in the table below.

Table 29 Contribution of Independent Variables to Prime Motivational Factors

	<i>Feeling Valued</i>	<i>Achievement</i>	<i>Work Itself</i>	<i>Relationships</i>	<i>Pay and Conditions</i>
Variable with strongest contribution and Beta value.	Tenure .281	Tenure .158	Tenure .168	Tenure .217	Tenure .233
Second strongest and Beta value	Sex .092	Education .119	Age .082	Age .123	Sex .061

The relationship between motivation and tenure as length of service in a particular job was researched by Ronen (1978) who found that the graph of change in motivation with length of service resembled a U shape. Ronen suggested that intrinsic satisfiers operated at particular stages of service whilst at other stages particularly the middle period the pattern was more affected by dis-satisfiers.

A study of 996 Queensland police across career spans and thus tenure found that intention to leave the organisation before maximum retirement age had a positive relationship with tenure (Drew, 2003). This is consistent with numerous other studies which have demonstrated a steady decline in police motivation with increasing tenure (Beck 1999, Bragg 2003, Chiou, 2004, Holden, 1980, Marcus 2007). This finding was confirmed in the current study.

Researchers have established that occupational stress levels of police officers are comparable with other professions and in contrast to the popular stereotype stress among police officers is typically a result of organisational aspects of their work and not from exposure to operational threats (Hart & Cotton, 2002; Steinberg, Tyman, Donald & Williams, 1994). Hart and Cotton's research noted that most of this police stress results from the actions of leaders, and management practices which include performance appraisals, lack of recognition, no career opportunities, role confusion, and lack of direction. As these influences are a part of the internal police working environment it is likely that stress builds up with increasing exposure to this negative environment and that stress and demotivation increase hand-in-hand with increasing tenure and exposure to the stressors.

Hart (1999) found that between three and thirteen percent of the variance in the overall satisfaction in a police officer's life was derived from job-satisfaction. According then to Hart (1999) the police officer's job was not the major determinant on his or her wellbeing. Hart and Cotton (2002) make the anecdotal point that many of the police they interviewed commented that they enjoyed their job. A fact consistent with, the high response to the current study indicating that

officers find the work itself stimulating and enjoyable. It is logical to deduce that officers who volunteered for this type of work over other types of employment would enjoy the type of work. Hart found that police work exposes officers to both negative and positive experiences and these experiences have corresponding negative and positive impact on officer's levels of job-satisfaction. As an officer grows in confidence and mastery of skills and professionalism in her or his area of policing the officer could be expected to gain greater satisfaction from performing the work. This could explain why after about eight years experience officer's motivation from the *Work Itself* begins to increase. This may be why *Work Itself* is an exception where motivation tends to increase with increasing tenure after about eight or nine years service.

Promotion has been identified in a number of studies as a motivator that is linked to tenure (Oshagbemi, 2003). Promotion has been linked to the Prime Motivational Factors of: *Feeling Valued* and *Advancement*. Qualitative comments strongly suggest that it is seen as a hygiene factor and generally in a negative light. Graphs across tenure only form the familiar V pattern for the Prime Motivational Factors, *Work Itself* and *Pay and Conditions*. The graph for every Prime Motivational Factor shows a decreasing level of motivation with increasing tenure.

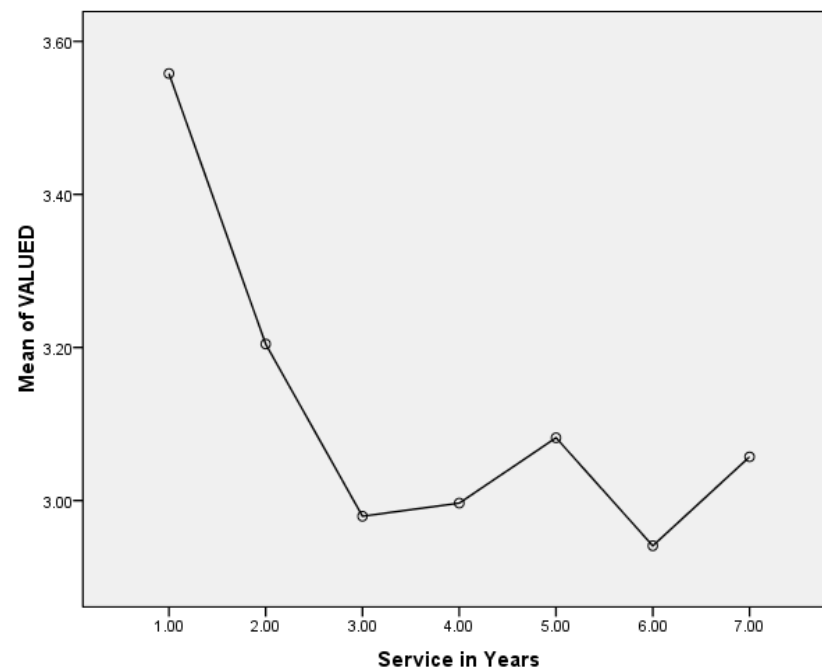
Career stage as a predictor of police behavior has received significant attention from researchers in the past decade. The concept of career stage is linked with the concept of tenure because the various theories of career stages generally identify particular stages in terms of years of service. The work of Beck (1999) was described in the literature review. In particular, her five year cross-

jurisdictional Australian and New Zealand study of police proposed a four stage model of career stages for police. Each stage she argued was marked by clear changes in job-commitment, job-satisfaction and motivation. The first of these stages was the Pre-entry stage where applicants formed opinions and beliefs prior to entry to the police force or service. The second stage was the Academy/Police College stage where attitudes, commitment and motivation were moulded by peer group socialisation and influenced by police culture. The third career stage was the Field Training Stage where the trainee or probationary constable was very highly influenced by peer group norms (Beck). In Queensland this stage is usually a 12 month stage where the officer is a First Year Constable. The trainee will generally try hard to complete all training tasks and be accepted by peers in order to satisfactorily complete the traineeship and be confirmed as a constable on permanent appointment.

The final career stage in this model was the Advancement and Stabilisation stage which was marked by a general decline in officer's commitment and motivation. Beck's study (1999) found that trainee constables experienced an extreme impact in their first experiences of a police organisation and that these experiences were reflected by the significant decline in motivation and commitment from these constables in just the first nine weeks of service in the field. Overall, Beck found that motivation, job-satisfaction and commitment declines as an officer's length of tenure increased - a finding consistent with the results of this present study.

Organisational commitment and job-satisfaction were found by Beck (1995) to rapidly decrease across the initial three years of a constable's service. *Feeling Valued* was found by Beck to be the single most important motivational factor affecting officer's motivation during the advancement and Stabilisation stage. This is consistent with the findings in this study where *Feeling Valued* emerged as the clearest and strongest Prime Motivational Factor with an Alpha coefficient of .902. Beck's study found that the relationship between high motivation and perceived organisational support was highest during the later part of this stage during stabilisation or entrenchment. These findings are also consistent with the findings of this study that a sense of feeling valued shows a small increase with advanced tenure after 25 years.

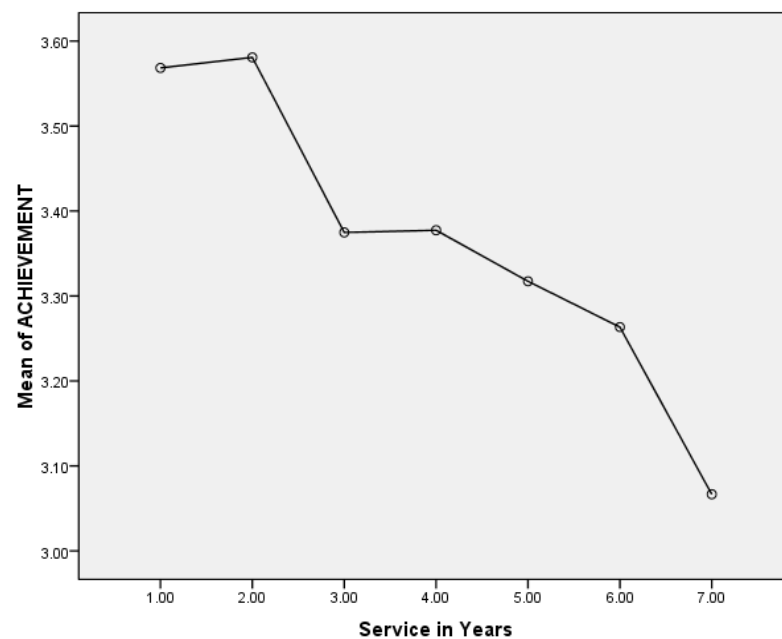
Prior to 1990 entry to the then Queensland Police Force was restricted to persons under 35 years of age. There was therefore a structured link between tenure and age. This correlation between age and tenure has been weakened by the continual relaxation of age limits since 1990. Figure 28 below shows the graph of motivation from *Feeling Valued* against tenure as years of police service.

Figure 28 One way ANOVA factor *Feeling Valued* and *Tenure*

After an initial plummet during the first three years, motivation from a sense of *Feeling Valued* continues to drop rapidly for the next three to five years until the point where it fluctuates around a mean of about three. There is a small rise in motivation from *Feeling Valued* for the group members who have 25 years or more tenure. This may be caused by the effect of disillusioned and demotivated officers taking early retirement at age 55 years. The phenomenon could also be an expression of the link between tenure and age for those who joined prior to 1990 as ANOVAs for age demonstrate a clear increase in levels of motivation for those over 55 years of age. The ANOVA for *Feeling Valued* showed that the group of officers with only two years service or less (Group 1) had a statistically significant difference with the mean scores of every other group. The only other group comparison to show statistically significant difference was between Group 2 (3-6 yrs) and Group 6 (19 to 24 years). This is another expression of the rapid

drop in motivation form *Feeling Valued* that occurs over the first two years of an officer's career. This replicates similar findings in previous studies (Beck, 1999; Bragg, 2004).

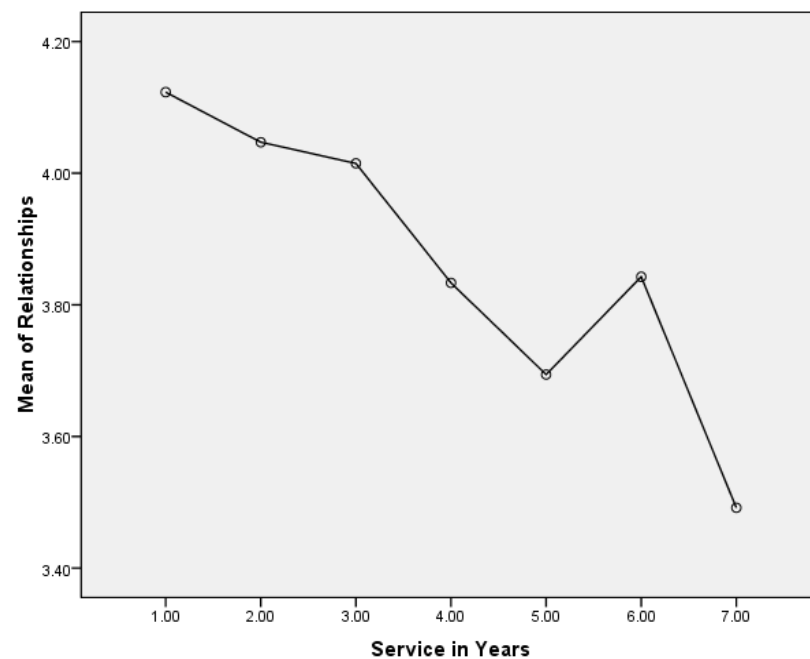
Figure 29 One way ANOVA factor *Achievement* and *Tenure*



Exploration of the factor *Achievement* with ANOVA revealed that statistically significant differences exist only between groups 7 (25 years and over), and Groups 1 (2 yrs and under) and Group 3 (3 to 6 years). This is because of the difference between the means of the initial high motivation from *Achievement* during the initial one to six years and the steep drop in motivation after that. This was the only Prime Motivational Factor where motivation did not drop sharply after two years. Motivation from a sense of *Achievement* then diminishes steadily from around the sixth year of an officer's service until the lowest point at the end of the officer's career. What organisational, environmental, cultural or other

factors contribute to this steady decline in motivation from *Achievement* is not clear. Qualitative comments by officer's indicate that lack of recognition, negative media reporting of police and persistent micro-management all diminish and officer's sense of motivation from *Achievement*. It may be that over time repeated exposure to these experiences dilutes this Prime Motivational Factor. This question may be the subject of specific future research.

Figure 30 One way ANOVA factor *Work Relationships and Tenure*



Consistent with previous studies (Bragg, 2003; Beck, 1999) motivation from achievement and relationships declines gradually with increasing tenure. Figure 30 above shows the general decline in levels of motivation from Workplace Relationships as tenure increases.

Figure 31 One way ANOVA factor *Work Itself* and Tenure

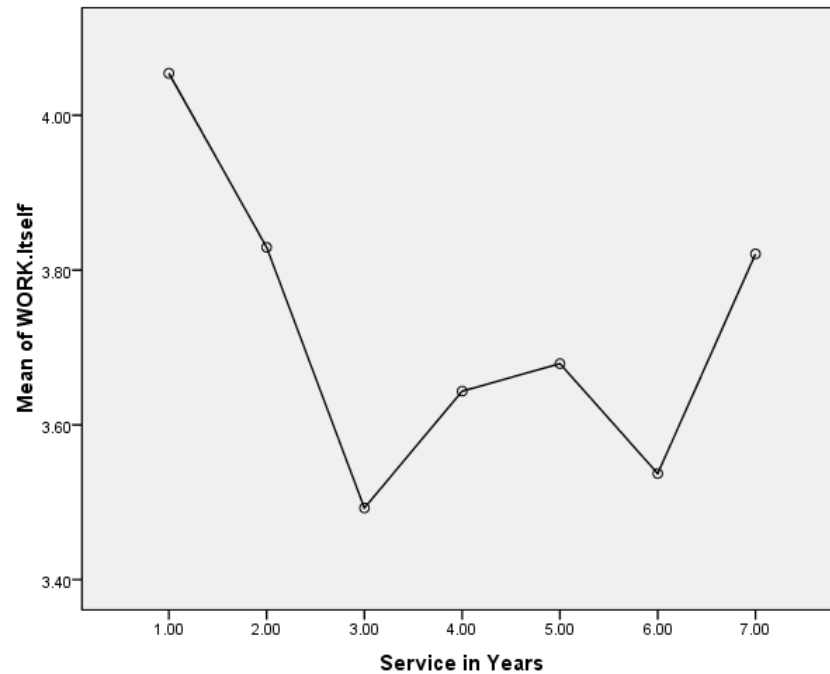


Figure 31 above graphs motivation from the *Work Itself* against tenure as years of service. After an initial steep fall during the first six years of service motivation from the Prime Motivational Factor, *Work Itself* fluctuates a little then picks up sharply for the 25 years and over group. There is a rough U or V pattern formed. This demonstrates that police at all stages of career and points of tenure share a similar motivation from the enjoyment of the job and the nature of the work they joined for.

Figure 32 One way ANOVA factor *Pay and Conditions* and *Tenure*

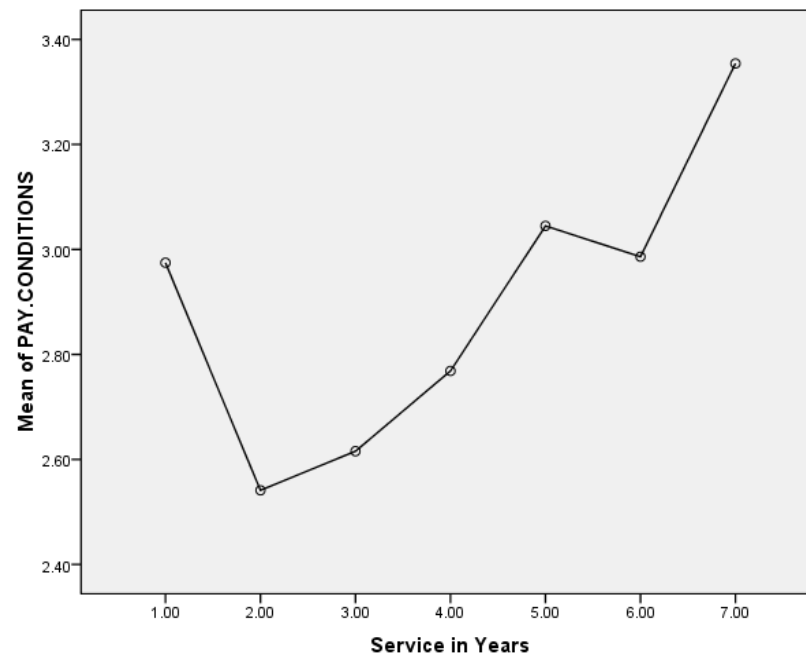


Figure 32 above shows the graph of motivation from *Pay and Conditions* against Tenure as service in years. The factor *Pay and Conditions* on the other hand is unique, in that it showed a gradual increase in motivation with increasing tenure after the initial fall during the first two years of tenure. This is shown in Figure 32 above as a graph of motivation from *Pay and Conditions* against tenure as years of service.

Overall Tenure has been shown to exert the strongest effect on all the Prime Motivational Factors and is their strongest predictor. A general trend of declining motivation with increasing tenure has been noted and the first two years of an officer's career is usually followed by a rapid plummet in motivation and followed by continuing decline after that. The difference between initial motivation levels and motivation levels after twenty five years service is generally statistically significant. These findings highlight a significant problem for the QPS

but also suggest that tenure targets could be used as the most effective frame for future motivational policies.

RANK

Exploration with MANOVA revealed that there is a statistically significant relationship between Rank and each of the Prime Motivational Factors. Rank was shown to have a strong effect on *Pay and Conditions* with a Partial Eta Squared of .143 and moderate effect on *Feeling Valued* with a Partial Eta Squared of .09 and also a moderate effect on *Relationships* with a Partial Eta Squared of .063 (Cohen, 1988). In this study subjects were organised into four rank groups; Group 1 were Constables, Group 2 were Senior Constables, Group 3 were Sergeants and Group 4 were senior officers composed of Senior Sergeants and Commissioned Officers. Figure 33 to Figure 37 below provide visual graphs of motivation from each of the five Prime Motivational Factors measured against Rank.

Figure 33 One way ANOVA factor *Feeling Valued* and Rank

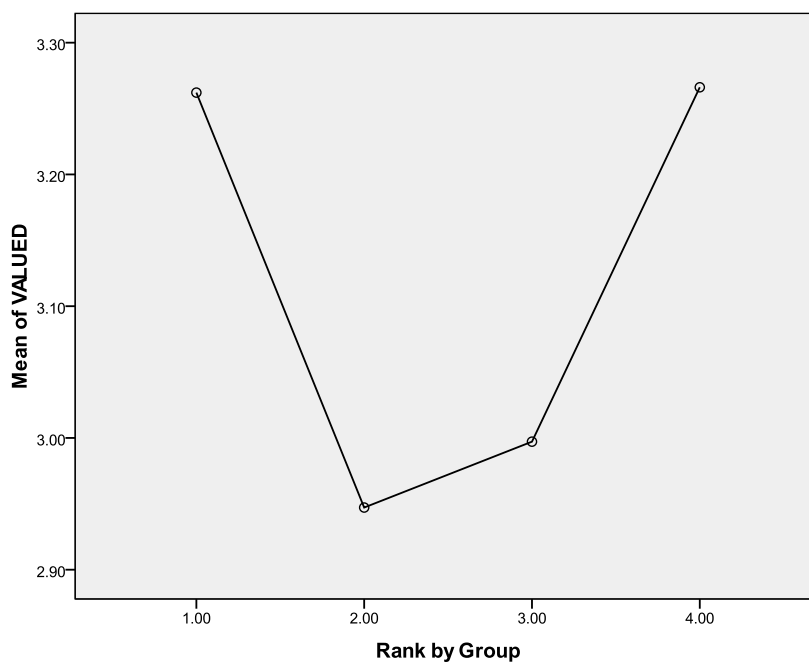


Figure 34 One way ANOVA factor *Achievement* and Rank

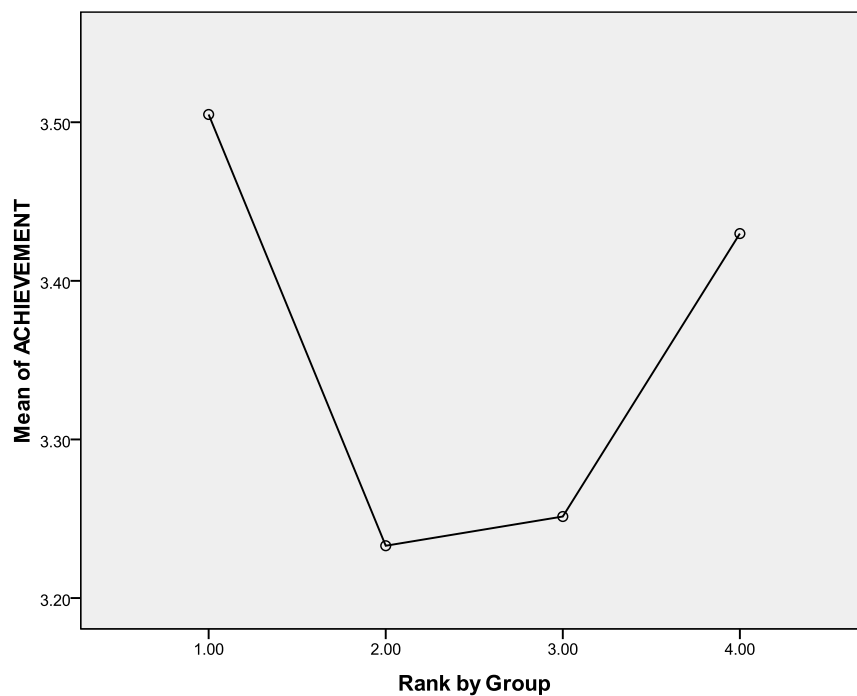


Figure 35 One way ANOVA factor *Work Itself* and Rank

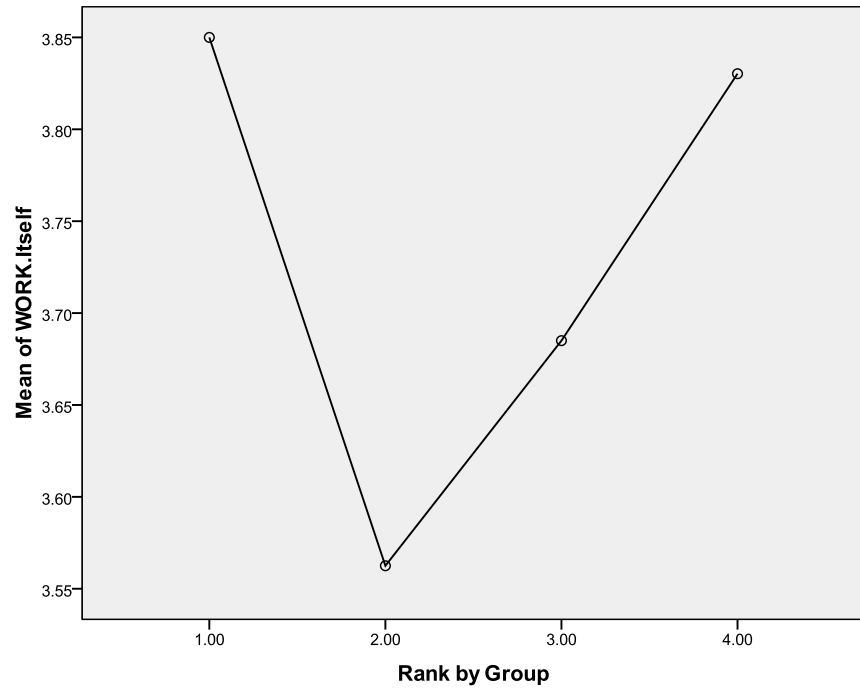


Figure 36 One way ANOVA factor *Workplace Relationships* and Rank

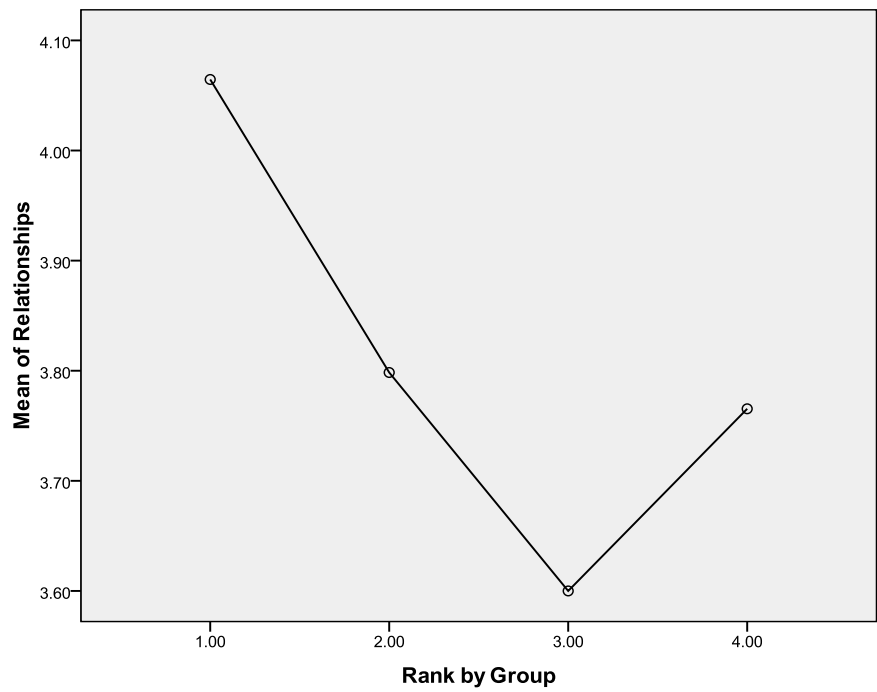
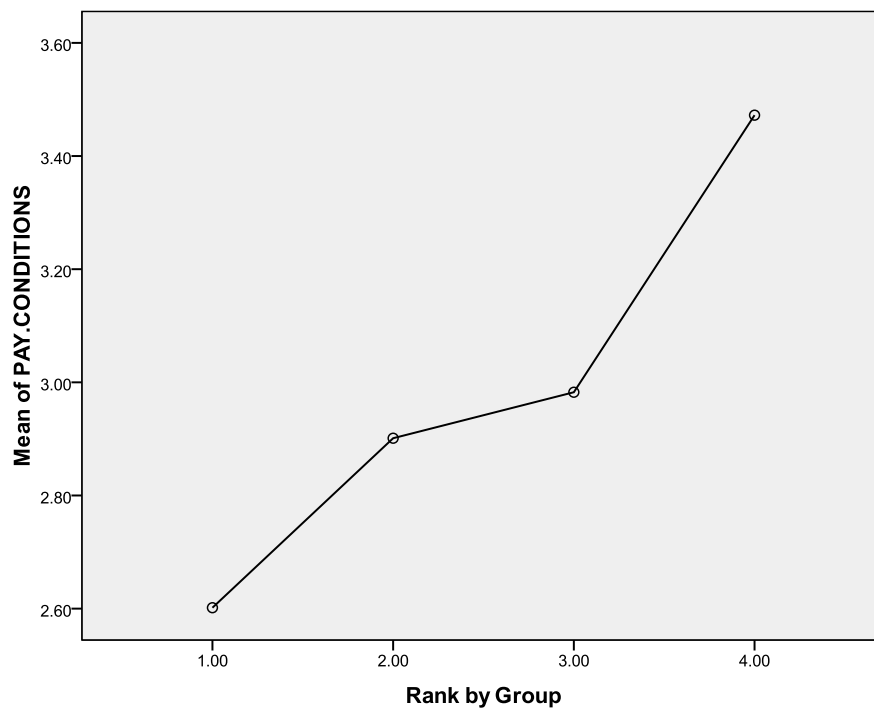


Figure 37 One way ANOVA factor *Pay and Conditions* and *Rank*



Multiple Variance Analysis showed that the demographic variable of Rank contributed independently more to the Prime Motivational Factor *Pay and Conditions* than any of the other demographic variables. Research has consistently shown a general tendency for higher rank to be associated with increased levels of motivation (Ronen, 1978; Miles, Patrick & King, 1996; Bragg, 2003; Oshagbemi, 2003). Various research has shown that police have high levels of satisfaction with the work they do and generally with their peers (Beck, 1999). This supports the identified Prime Motivational Factors of *Work Itself* and *Relationships*.

Although there were some between group variance of scores for these two Prime Motivational Factors partial Eta squared calculations revealed that rank had only a small effect for *Work Itself* (.038) and for *Achievement* (.033). Correlation of rank and age in the Taiwanese police showed a positive relationship that was

statistically significant (Chiou, 2004). In this study Rank showed significant correlations to both Age and tenure. There was a fairly high correlation between Tenure and Rank (.836) and a moderate correlation (.530) between Rank and Age.

In 2003, Bragg found in his research of 246 Queensland police that rank correlated strongly with promotion. In Bragg's study commissioned officers failed to show a statistically significant link between motivation and workplace relationships but constables reported the highest correlation between motivation and workplace relationships. A First Year Constable commented "I am motivated by recognition from my superiors and a sense of achievement. As a first year constable I guess it's natural to have very high motivation, but I work with some highly motivated great people and at a great station."

In their study of the Royal Ulster Constabulary, McHugh and Verner (1998) argued that the position of inspectors as middle managers sandwiched between the executive and the front line put special pressure on this rank. They argue that the inspectors are charged with imposing change on subordinates and expected to increase productivity often with reduced resources and that this results in a sense of alienation from both groups and subsequent reduction in motivation. They thus argue that the role of the rank in Northern Ireland causes significant demotivation because of *Workplace Relationships*. Inspectors under this system are equivalent to Queensland police positions at both the rank of Senior Sergeant and Inspector.

In Brunetto and Farr-Whaton's 2003 study of motivation and commitment in an Australian police jurisdiction 178 police completed surveys and participated in focus groups. The study found that police of the rank of sergeant and lower

ranks were motivated by positive communication processes with superiors and that they had a high level of pride in their personal work. The positive communication fell into the Prime Motivational Factors of *Feeling Valued* and *Workplace Relations* whilst the pride in the work falls into the Prime Motivational Factor of *Achievement*. In the present study these Prime Motivational Factors were strong motivators for Constables but did not influence the ranks of Senior Constable or of Sergeant as strongly.

Brunetto and Farr-Wharton's study (2003) also found that as rank progressed to the rank of sergeant dissatisfaction with information communication modes and with performance appraisal systems increased. So, as constables progressed to the rank of sergeant dissatisfaction with the Prime Motivational Factor *Pay and Conditions* increased. In the present study the results for *Advancement* are very highly motivated by workplace relationships and this is consistent with Brunetto and Farr-Wharton's finding except in the case of the factor *Advancement*. Pay and conditions becomes increasingly important as a motivator from the rank of constable onwards. This is consistent with the findings in this study; that there is an inverse relationship between motivation and rank below Commissioned rank and motivation.

Other studies of Queensland police (Bragg, 2003; McElroy, Morrow & Wardlow, 1999) have made similar findings. These studies found that overall motivation decreased as an officer progressed to the rank of Senior Sergeant and that for these lower ranks a key motivator was workplace relationships. This motivation of lower ranks was found by Brunetto and Farr-Wharton (2003) to be dependent on positive communication with superiors and therefore *Workplace*

Relationships was the dominant motivating factor for these ranks. A study of 185 front-line employees (Audesh, 2005) found a positive relationship between perceived managerial sincerity when providing feedback and employee motivation and commitment. This supports the finding in this study; that there is a strong link between perceived supportive leadership and motivation and that a strong key for this is a relationship of trust.

Other studies have found that the drive for promotion to commissioned ranks is linked to *Pay and Conditions* through enhanced pensions and benefits and to *Achievement* through greater decision making capacity (Murphy, 2005). Bragg (1998) found Commissioned officers to be the most satisfied with pay and conditions. This is easily understandable given the gap of over \$ 20,000 per annum between the lowest pay level for Inspectors and the highest level of Senior Sergeants pay award. This benefit is magnified when one considers that the defined benefit pension will magnify this gap in any retirement superannuation payout. In this case motivation from *Achievement* peaks at the rank of Senior Sergeant but motivation from *Pay and Conditions* continuously increases with rank to the highest point with Senior Ranks of Senior Sergeants and Commissioned officers. This finding is consistent with the findings of Bragg in his research of police in Metropolitan South Region.

The graphs for *Feeling Valued* (Figure 33), *Achievement* (Figure 34), *Work Itself* (Figure 35) and *Relationships* (Figure 36) all followed a variant of the classic V pattern. *Pay and Conditions* was unique in that for Rank its effect as a motivator increases with increasing rank.

EDUCATION

Respondent data were broken into four groups based on educational level. Group 1 included officers whose education was to a trade or high school level. Group 2 included officers whose highest educational achievement was a TAFE diploma or equivalent while Group 3 were officers who had completed undergraduate university study and Group 4 were those who had Post-graduate qualifications. When MANOVA was used to explore differences in the five dependant variables using the independent variable Education statistically significant differences were found for the Prime Motivational Factors of *Feeling Valued* (.018) and *Achievement* (.029). The Partial Eta Squared values for *Feeling Valued* was .020 and for *Achievement* was .024.

Both these values show a small effect size as less than .06 is regarded as small (Cohen, 1988). Effect size is a measure of the power of the effect of an independent variable on the dependent variable (Pallant, 2005). Multiple Regression analysis was used to extract standardised Beta values to measure the contribution of Education to the each of the Prime Motivational Factors. A Beta value of .003 for *Feeling Valued* indicated that Education was only a predictor for less than 1% of the variance within *Feeling Valued* (Pallant, 2005). The Beta value for; *Achievement* was .119 (11.9%), *Work Itself* was .043 (4.3%), *Relationships* .054 (5.4%) and *Pay and Conditions* .021 (2.1%). Although Education has a statistically significant relationship with *Feeling Valued* and *Achievement* its influence on these two Prime Motivational Factors is overall very limited as indicated in Figure 38.

Figure 38 One way ANOVA factor *Feeling Valued* and *Education*

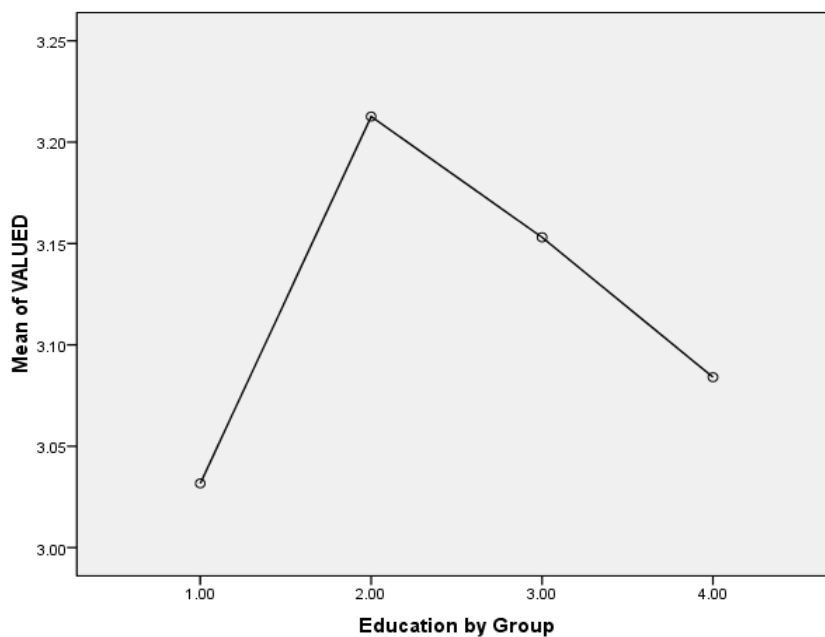
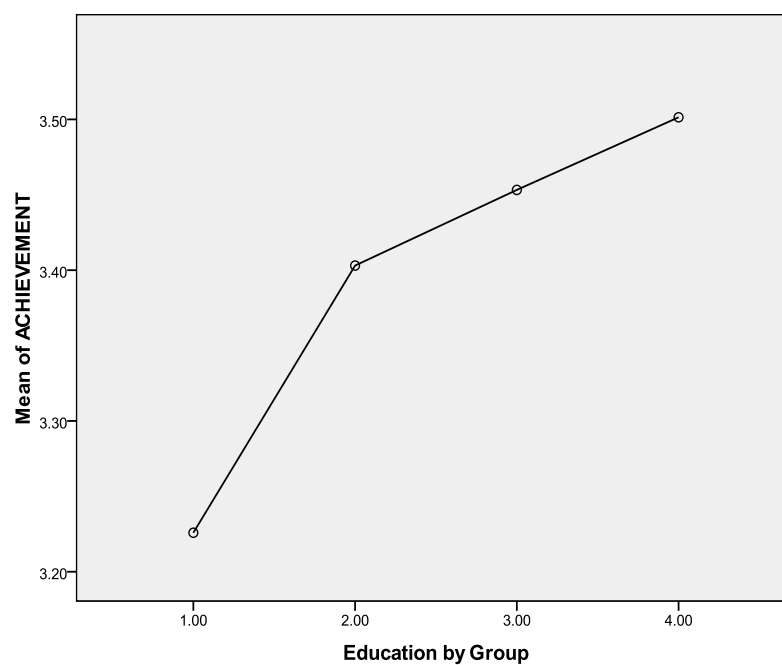


Figure 39 One way ANOVA factor *Achievement* and *Education*



Of all the Prime Motivational Factors the only factor that showed statistically significant relationships with education were *Feeling Valued* and *Advancement*, and the strength of both these relationships as measured by a Eta squared was only very small. Not surprisingly those who are motivated by *Advancement* tend also to be the individuals who are motivated by education, presumably because education is seen as an advantage for promotion and other advancement. In 1980, Holden found that Houston police demonstrated four significant relationships between educational levels and workplace motivation. These relationships were between workplace motivation and: the overall score, work conditions, recognition and advancement. In each of these four factors the relationship was only weak and yielded low gamma scores (Holden, 1983). Again, this pattern is similar to the results in the current research and may indicate that police culture, management styles and working environment may not have changed in any fundamental ways that affect motivation over the past 28 years and is consistent across American and Queensland jurisdictions.

In his 2004 study of 680 Taiwanese police, Chiou divided the study population into four groups depending on the highest academic achievement namely: High School, Community College, Bachelor Degree and Graduate School. Chiou (2004) found statistically significant difference between these groups for measurements of both job satisfaction and job dis-satisfaction. The study of Queensland police by Bragg (2003) reflected the rising levels of police education following the Fitzgerald reforms of the 1990s. The sample of 246 officers in Bragg's study revealed that over eighty percent had completed some post-school education and that over forty five percent had undertaken tertiary study at some

level. This was also consistent with findings in Bragg's 1998 study of Queensland police.

There has clearly been a cultural shift away from the earlier anti-academic culture and towards a more professional construct of a police profile. When the Prime Motivational Factor *Feeling Valued* was explored with ANOVA a statistically significant difference was found between Group 1 and Group 2 for Education. One explanation for this pattern may be that persons from Group 1 have a trade or high school education and are not inherently motivated by education whilst those in Group 2 have been exposed to some tertiary education at Diploma level and have found the experience motivating. Motivation from *Feeling Valued* may have fallen for Groups 3 and 4 because police with higher levels of education may feel that their attainment has not been recognised. This phenomenon has been noted in American police forces (Bragg, 1999). In the current study there were also statistically significant differences between education level for Group 1 and Groups 3 and 4 for the factor *Achievement*.

Although education is statistically significant in relation to motivation from *Feeling Valued* and *Achievement* overall it is a weak predictor of motivation and does not exert a strong effect. Education would not then be expected to be a key ingredient in motivational policies and planning.

DOES GENERATIONAL COHORT INFLUENCE MOTIVATION?

GENERATION

The influence of the different values of “Generational Cohorts” is a current issue for both workplace managers and educationalists and the very existence of these cohorts is a matter of unresolved academic dispute (Jorgensen, 2003). One of the questions which this research set out to answer is “Do the sources of workplace motivation (for police) vary significantly between the generational cohorts?” The background of the issue is briefly discussed below before the research results in respect to age and tenure are offered in response to this question.

Generational cohorts have been linked to variations in workplace motivation (Arsenault, 2004; Zemke, Raines & Filipczak, 2000). As noted in the literature review, these writers argue that these cohorts are not merely groups of people of similar age but cohorts of distinct beliefs, values and behaviours (Arsenault, 2004; Bova & Kroth, 2001). However, this thesis sought to test whether values, mindsets and resultant behaviours of police officers, in the workplace change with age and whether the changes were markers of a distinct generational groups. This is an important aspect of motivation to investigate as, proponents of this view argue that it is crucial for management to understand these differences because: they determine how workers view leadership, how different workers react to structural styles of organisations (Arsenault, 2004; Westerman & Yamamura, 2007).

Of interest to this thesis was whether generational cohort is one of the strongest influences on workplace values and whether it exerts more influence than age or maturation (Smola & Sutton, 2002). The thesis sought to explore the question whether the unique mind set of each generation determines how that generation leads others and how they prefer to be led as claimed by Arsenault (2004) and Westerman and Yamamura (2007).

Arsenault (2004) comments that as baby boomers advanced in their workplaces and increasingly identified with their work they should become more satisfied with advancing age, but blamed the decreasing work motivation of baby boomers on the fact that workers have increasingly become more dispensable and therefore the job-satisfaction of baby boomers has, decreases with increasing age (2007).

This thesis has provided the rigour for exploring the motivational generational differences that Jorgensen (2003) and Hull and Read (2003) argue is lacking from the literature promoting the existence of distinct generational cohorts. Some have observed that the bulk of literature promoting the concept of generational differences is often subjective, uses cross-sectional data and not data from longitudinal studies and unlike scholarly literature draws arbitrary lines between generations (Jorgensen, 2003). Even Arsenault (2004) who argues that his research validates that generations have their own culture and traditions also agrees that there is a lack of research that validates this and that much of the literature on generational differences is unscholarly mass media promotion of popular stereotypes.

Jorgensen (2003) argued that perusal of popular literature that attempted exploration of the topic of generational differences revealed some writers who confuse generational cohorts with age and often present rhetorical arguments. Discussion on generational differences seems based largely on observation rather than empirical work (Jorgensen). Popular writers promoting ideas of distinct generational cohorts tended to be subjective and rely on single-point-of time date while using retrospective comparisons (Jorgensen). Sackett (2002) described this literature as entertaining and generalised but research not capable of standing up to careful scrutiny.

It became apparent that definitive empirical conclusions to this question of existence of generational cohorts would best be addressed through generation long longitudinal studies that recorded a person's behaviours and value changes over a long period. There is a general paucity of long term definitive research on which question. One longitudinal study of youth attitudes in the United States was conducted over 25 years and surveyed between 14,000 and 19,000 young people annually (Sackett, 2002). The study found very little variance in: life goals, desired job characteristics or the importance of work in young people's life (Bachman, Johnston & O'Malley, 2000).

To attempt to answer the question in a shorter time this research study was directed towards forms of cross-sectional research. This research study compared the graph patterns for motivation by age against motivation for tenure as a means of testing the hypothesis posited by the Generational Cohort theory. If generational theory was correct, then the pattern in this study would be expected to change as respondent groups age and move to the right on the graphs X axis. If

the theory is not valid then the pattern should remain similar regardless of the era when the survey was conducted. This has been done in the present study and the “V” pattern emerged.

Unfortunately, other than two recent studies (Bragg, 2003; Crossman & Chinmeteeptuck, 2003; Shah, 2003) which also found a similar pattern there are no other studies early enough to compare the patterns across generations. Another method of testing the theory is to measure the behaviours of typical samples of each group to compare the behaviours to the predicted stereotypes. If generational cohorts are the powerful segmenting markers of behaviour and values claimed, then this demographic variable will manifest its influence on motivation through the demographic variable of age used in this study. This will not definitively prove that the effect is caused by a generational issue instead of age only but is consistent with both. On the other hand if the demographic of age does not significantly influence workplace motivation then generational cohort would have little influence over police work motivation.

In the current study motivation of police was statistically analysed with respect to age and to tenure to ascertain whether the results are consistent with the generational cohort theory. When the data for this study were analysed using a MANOVA for age it was found that age exerted only a very weak influence on the overall motivation of the police population. This was consistent with earlier studies (Bragg, 2003; Chiou, 2004; Holden, 1980; Mattoz, 1987). Likewise when the data were analysed through multiple regression analysis the Beta coefficients indicated that the variable age failed to strongly impact on any of the Prime Motivational Factors. By contrast the variable Tenure had a standardised Beta co-

efficients that exerted strong influence over the Prime Motivational Factors and was the dominant demographic variable. The influence of tenure on one Prime Motivational Factor was over five times the effect exerted by the variable age. As age therefore has little, if any impact on any of the five Prime Motivational Factors the results of this study do not support the generational cohort theory. This pattern, where tenure exerts far more influence than age on police motivation, has been noted by other researchers (Bragg; Beck, 1999). Similar conclusions have been reached by researchers studying other industries like the hospitality industry (Shah, Crossman & Chinmeteepituck, 2003). It is therefore concluded that generational cohorts have no significant influence on the workplace motivation of police from Metropolitan North Region.

IMPLICATIONS FOR THE QPS

Herzberg, Mausner & Snyderman, (1959) found that the motivator factors and hygiene factors he identified in the study had five distinct effects: performance, turnover, mental health interpersonal relations and attitudinal. Participants in the classic study each described how the motivating experiences all resulted in one or more of these changed behaviours. Each one of these effects is an area of importance to the QPS today, but performance, turnover and mental health are especially significant.

Qualitative comments made by Queensland police officers in the current study clearly linked these effects to the five Prime Motivational Factors. A number of officers stated that they were considering alternative employment

because of what they considered inadequate pay (*Pay and Conditions*) or lack of recognition (*Feeling Valued*) and so clearly linked these two Prime Motivational Factors to the effect of turnover. Other officers mentioned the stressful effect of authoritarian managers or the depression that was worsened by lack of concern for welfare and so linked *Feeling Valued* with mental health. Positive feelings about colleagues and team pride were linked by many to motivation to perform quality work and so link *Relationships* to the attitudinal effects. Disillusionment with the promotional system and with opportunities to develop and transfer to new areas was also linked by officers to reduced motivation and lowered work output. This linked *Advancement* to attitudinal effects.

Herzberg found concrete links between worker motivation and workplace behaviour that directly impact on productivity. For instance, his 2003 study found close correlations between worker dissatisfaction and high levels of absenteeism. Absenteeism is one of the key elements now measured in QPS strategic Operational Performance Reviews. This nexus between performance as measured by workplace productivity and motivation has been well proven since Herzberg, Mausner and Snyderman classic 1959 study (Brunetto & Farr-Wharton, 2003; Herzberg, 2003; Lindner, 1998; More, Wegner & Miller, 2003; Whisenand & Rush, 1989; Wright, 2001).

Managers endeavouring to maintain productivity and efficiency in a police service workplace, especially at a time of high employment are fettered by an environment that prohibits individual rewards for the hardest working staff and that insists on “equal” treatment of all (Halsey & Osborne, 1992). It is therefore critical that public service managers including police leaders have in their

repertoire of people management skills a detailed understanding of what motivates their workforce (Murphy, 2005).

Because police organisations employ an increasingly diverse workforce in terms of gender, ethnicity, language, leaders and planners need to understand not only the general motivation of their workforce but what motivates specific demographic sectors of their staff. Where there is an understanding of the factors that motivate specific groups in the workforce, management is able to use that knowledge to segment the workforce and target motivational or recruiting and other beneficial strategies effectively to a specific group (Arsenault, 2004).

The general approach to police work shown by the officers of Metropolitan North Region is a positive one as demonstrated by an overall mean response of 3.53 to statements indicating job-satisfaction as opposed to an overall response of 2.62 to the statements denoting job dissatisfaction. Officers were motivated and de-motivated by the same elements that studies over time and across international jurisdictions continually find: on the positive side, enjoyment of the work itself, a sense of achievement helping the community, pride in the team and acceptance by peers and on the negative side, de-motivation from, unsupportive bosses, inadequate working resources, cumbersome and continually changing administration and recording systems and the promotional system.

These elements closely mirror the findings of a nationwide survey of New Zealand police which has just been released (Featherstone, 2008). In the New Zealand study 4,880 employees responded and police nominated : high camaraderie, helping the community, variety of work, and catching criminals as motivating factors in their workplace whilst: workload, lack of recognition, lack

trust from management, poor resources and image were all de-motivating factors (www.internalcommshub.com/open/news/nzpolice.au.shtml). The study also showed that New Zealand police were twice as disengaged from their work than the general working population. The significance of this part of the findings is that the police in Metropolitan North Region are generally satisfied from their work and are motivated by those elements that typically motivate police worldwide.

Beck's (1999) five year study of Australian and New Zealand police found that the police organisations had a unique problem with motivation that grew worse with the officer's tenure. The problems of low police motivation on one hand and increasingly high demands for an effective and accountable police service on the other have been noted in later studies (Wang, 2005; Bragg, 2003; Hart & Cotton, 2002). Hence police leaders need to effectively lead and manage in ways that increase officer's motivation. To do this it is essential that leaders understand their workers sources of motivation (Herzberg, 2003; Myers 1964). The Prime Motivational Factor model provides leaders with an understanding of the prime factors that motivate police and of the elements that add to or detract from those prime factors. As such it is intended as a ready reference tool for managers to use as a standard to reference against proposed policies, strategies or orders to ensure that the proposed policies, strategies or orders tend to maximise motivation. This model is a unique planning tool for police managers in the absence of other models of motivation specific to police.

The QPS has no overriding theory of motivation or model that is used when drafting human resource policies or action plans. This research has produced a simple workable model of Queensland Police motivation which can be

used to maximise workplace satisfaction of police by considering the impact of proposed new policies and orders on the five Prime Motivational Factors, *Feeling Valued, Advancement, the Work Itself, Relationships* and *Pay and Conditions*. Therefore the model can be used when targeting policies to specific demographic cohorts by maximising the motivation from Prime Motivational Factors and associated elements that influence that cohort.

Although there was a gradual decline in motivation with increasing age generally the demographics of age, education and gender were not strong predictors of workplace motivation. As there were no strong correlations between these demographic variables age focused motivational policies targeted at these groups may not be effective. This was consistent with previous research findings (Beck, 1999; Bragg, 2003; Jorgensen, 2003; Newton, 2006). One minor exception to this general finding was that after the age of 42 years officers began to be less motivated by the influence of *Workplace Relationships*. The significance of these two points are that the collegiate culture of policing should be encouraged as a positive motivator and attraction to those considering recruitment whilst increased improved pay and conditions may be an effective motivational incentive for police who have reached early retirement age to stay on.

Some sources of motivation were found to be universal and appealed to police of all ages, gender and education. One was work itself where officers from all demographic subgroups commented that they were motivated by the work itself. This was also one of the most frequently made qualitative comments and officers mentioned satisfaction from doing real police work as opposed to administrative tasks, arresting offenders assisting members of the community and

generally doing meaningful work at the “sharp end” of law enforcement. A significant number also pointed to distractions from active police tasks like routine correspondence and completing complex computer entries as major dis-satisfiers. This is not a surprising result as most officers would have been attracted to the QPS by the prospect of performing police operational duties.

The significance of this is that a workforce policy that maximising the proportion of officers performing community support and law enforcement roles will enhance motivation across all ranks, ages, tenures and gender. Although the current policy of “civilianising” non-operational police positions by reclassifying administrative and other positions that do not require the exercise of police powers as public service officer positions was originally driven by economic rationale it is also validated by this research as a positive police motivational policy.

Workplace Relationships are an important motivator to police in all categories. Qualitative comments from officers of varying ranks, and tenures all echoed frequent similar comments about the personal importance of being accepted and respected by their colleagues and having pride in their team. This tended to be a universal comment across all demographic groups although the importance did seem to decline after the age of 42 it was still a motivator at all ages.

The Prime Motivational Factor *Feeling Valued* was also clearly identified as a factor that has a strong motivating influence across all demographic factors and was not only clearly identified in the statistical data but was frequently referred to in both positive and negative terms in the qualitative comments. Many officers referred to the powerful motivating effect a supportive encouraging

supervisor had on them. Even more respondents made reference to the fact that their work motivation had suffered due to unsupportive supervisors and managers. Numerous police also mentioned that lack of recognition for work well done and extra effort as well as undervaluing their work had seriously de-motivated them. This result is consistent with numerous earlier studies of Queensland police (Bragg, 2003; Brunetto & Farr-Wharton, 2002, Steinberg, Tyman, Donald & Williams, 1994) and other jurisdictions (Beck, 1999; Chiou, 2004; Featherstone, 2008; Holden, 1980; Loo, 2004; Winfree, 1999).

Despite the Out-of-the Blues Project, the Positive Workplaces Program and the Negative Work Practices Workshops which the QPS has conducted over a number of years there is still a clear need to purposefully develop transformational supportive leadership skills in QPS managers and supervisors at all levels. This result shows the significance for the organisation of nurturing a culture of team leaders who adopt a non-authoritarian style, communicate frequently with staff and place high importance on providing positive feedback and recognition.

In this study the demographic with the single strongest correlation with motivation was tenure. It was the clearest predictor of motivation of all the demographics. This is consistent with the findings of other studies of Australian (Beck, 1999; Bragg, 2003; Brunetto & Farr-Wharton, 2002) and overseas police (Chiou, 2004; Holden, 1980; Featherstone, 2008). Bragg, (2003) found job-satisfaction peaked in the first two years of an officer's tenure and fell to a lowest point after 10 years tenure.

All Prime Motivational Factors were influenced by tenure. In the present study all Prime Motivational Factors except *Pay and Conditions* witnessed

declining motivation with increasing tenure. After an initial plummet in the first three years, officer's levels of motivation for pay and conditions continually increased with increasing tenure and jumped significantly at about 25 years service. Motivation for all Prime Motivational Factors except *Workplace Relationships* plummeted in the first two to three years service. This is probably due to the impact of the unforeseen negative experiences and limitations which the idealistic constables confront in the early years of their service. Frequent and consistent experience of; being lied to by members or the public, exposure to the worst side of human nature, personal abuse, frustration from a perceived hostile justice system and unnecessary bureaucratic administrative burdens and sometimes a culture of negativity no doubt saps the newcomers idealism and drive. Beck (1999) and Bragg (2003) also noted this fall in motivation in early career stage of police.

The significance of these findings for the QPS is that to maintain high levels of motivation and commitment to ethical service which has been imbued in police academy training it is important that junior constables be as far as possible positioned in environments with general high levels of officer motivation and positive workplace cultures. This applies not just to the first year as a trainee constable but at least for the first two years. It is implicit that there is some correlation between years of tenure and retirement age. That may explain the increase in motivation based on *Pay and Conditions* for officers with over 24 years service. At 24 years tenure, motivation from *Pay and Conditions* jumps significantly. When graphed against Age motivation for *Pay and Conditions* increases steeply and in a liner pattern from the youngest at 25 year olds to the oldest at 60 years old. It is likely that officers with more than 24 years service

tend to be in this group and are motivated by the prospect of boosting their pre-retirement savings. Based on this information it appears that offering monetary incentives is the most effective motivator for officers with more than 24 years service. If in future the service of experienced police is retained by extending the present compulsory retirement age beyond 60 years offering improved pay and conditions appears to be the most effective way to maintain motivation and productivity from this group. It may also be a vehicle to encourage officers to remain after 55 years of age.

RESEARCH METHOD AND INSTRUMENT

This research has validated the use of the survey instrument which was amended slightly from the survey questionnaire used in Chiou's (2004) study. The instrument can be further developed and refined to specifically measure the personal, inherent sources of each individual's workplace motivation as well as motivation derived from environmental factors. The significance is that this instrument has proven effective at identifying sources of workplace motivation for police officers and can be used to develop other instruments to further research the area and set benchmarks.

To specifically, identify the factors that motivate police in the work environment this research used a foundation of 14 motivator and hygiene sub-factors found by Herzberg, Mausner and Snyderman in their classic 1959 study of workplace motivation among professionals. The questionnaire consisted of a series of statements or words about one of Herzberg et al.'s motivational factors

and a Likert scale response to the statement or words. As well participants were asked to complete the sentence that started with “The thing that most motivates me to do good work in my job is” and invited to make any other comment they wished to make about their personal workplace motivation. Statistical analysis of quantitative data was conducted using SPSS and the qualitative data were coded and analysed for emergent factors. Findings from both sets of data were then compared and found to correlate. All of this data contributed to the construction of the Prime Motivational Factor Model.

CONCLUSION AND NEXUS BETWEEN RESEARCH RESULTS AND RESEARCH LITERATURE

When Herzberg, Mausner and Snyderman studied the factors that motivated professionals in 1959 he found that all sources of motivation had five distinct effects on the employees. These effects were: performance, turnover, mental health, interpersonal relations and workplace attitudes. All of these effects, especially the first three are of great concern to QPS managers today. The operational performance reviews which are conducted by the Office of the Commissioner critically review the operational performance of every police district in Queensland from a strategic view using; operational performance, employee turnover, absenteeism and mental health (stress) as some of its measures. Understanding the individual factors that inspire and motivate different sections of the workforce is therefore and always has been necessary for managers to effectively lead productive and stable workplaces.

Beck's (1999) comprehensive five year cross-jurisdictional study of Australian and New Zealand police implored police leaders to provide best human resource management practice by considering how equity and justice relate to job conditions and experiences. She stated that in organisations where employees are motivated and committed, turnover and absenteeism are lower whilst measured performance is higher (1995). To prevent decline and improve individual officer's motivation and commitment Beck (1999) argued that managers must recognise experiences and conditions that promote employee support, trust and respect for individual employees, and work to enhance the equity of the organisation's policies and procedures.

In addition to maintaining a motivated productive workforce in an environment where public sector policy limits personal incentives and the nature of police work itself can be highly de-motivating QPS managers must deal with a number of human resource challenges which are highly influenced by employee motivation and job-satisfaction levels. One of these challenges is employee turnover. Although the loss of skilled staff has always been a management concern it is especially so in the current environment of high employment and an aging population. This has been acknowledged as a growing concern internationally across the developed world (Károly & Panis, 2004; Marcus, 2007; Murphy, 2005). The problem is emphasised by the loss of skill and experience as "baby boomers" elect early retirement which has been described as "leaving a gaping hole across organisations" (Murphy). In his doctoral study of the reasons why police elect to retire or to stay Marcus found four factors which significantly impacted on an officer's decision. They were: a sense of "worth and belonging", "influences and relationships", "financial issues" and "appropriateness". A sense

of “worth and belonging” is similar to the Prime Motivational Factor *Feeling Valued*, while influences and relationships is similar to the Prime Motivational Factor *Workplace Relationships*. Marcus’ factor financial issue clearly links with the Prime Motivational Factor *Pay and Conditions*. Of the four three directly relate to the Prime Factors that were found to motivate police in this study.

Mobley (in Drew, 2003) identified six negative consequences of employee turnover within organisations. They are: further de-motivation and de-moralisation of the remaining workforce, economic loss of separation, cost associated with replacing and retraining staff, productivity losses, reduced business performance and lost opportunities. No serious attempt to develop policies and strategies to reduce staff turnover and increase retention could be commenced without an understanding of those factors that motivate the workforce and those that de-motive.

Mental health is most frequently observed in the QPS as officer stress. Numerous studies have pointed to the effects of a positive motivational workplace as a shield against stress (Drew, 2003, Loo, 2004, Steinberg, Tyman, Donald & Williams, 1995; Yagil, 2006). Loo found that high rates of burnout among Canadian police managers were linked with emotional exhaustion, de-personalisation and cynical and authoritarian attitudes of superiors. These findings have been replicated in other cultural and national jurisdictions (Yagil). It has been observed that service industry employees are especially exposed to chronic stress and burnout (Yagil). Yagil studied burnout among 198 Israeli service industry employees and found that genuine empowerment of employees by management and positive feedback from customers were successful buffers against

burnout that increased productivity and customer satisfaction. These attributes are fundamentally the same as those identified in the current study as the demotivating elements that detract from the motivation officer's receive from feeling valued. Hence police burnout it is argued is less likely in an environment where motivational elements in the work environment give officers a sense of being valued by their colleagues and the organisation (Hart & Cotton, 2002).

CHAPTER 7

RECOMMENDATIONS AND CONCLUSION

We can't solve problems by using the same kind of thinking we used to create them. - Albert Einstein

INTRODUCTION

This chapter concludes the research by, answering each of the research questions, providing recommendations for consideration by QPS managers, acknowledging the limitations of the research and considering the implications of the findings for the QPS. A brief summary, these limitations and the implications for future research of police motivation are also discussed. As demonstrated in Chapter 6, one of the key outcomes of this research was the development of the Prime Motivational Factor Model.

An understanding of the factors that motivate Queensland police officers is essential if senior management is to effectively address the major human resource and workforce planning issues currently facing the QPS. The Prime Motivational Factor Model and other findings of this research add to that understanding. In the current study, officers were motivated and de-motivated by the same factors identified in other studies over decades across international police jurisdictions and in one sense the results of the current study were unremarkable and consistent with police attitudes and experience elsewhere (Beck, 199; Bragg, 2003, Brunetto & Farr-Wharton, 2001, Chiou, 2003, Featherstone, 2008; Holden 1980). The plethora of recent research has highlighted the link between productivity from high

performance and motivation (Ashton & Sung, 2002; Castells, 2000;; Kochan & Foote-Whyte, 1999 in Jorgensen, 2005; Hull & Read, 2003).

Beck's (1999) five year research study concluded that the key to problems of motivating and increasing the commitment of police is to purposefully increase positive workplace experiences whilst minimising negative experiences.

For almost three decades out of four decades where industrial workers were studied, work and the workplace are not central life interests ... industrial man seems to perceive his life history as having its centre outside of work for enjoyment, happiness, and worth (Dubin, 1956).

To achieve this outcome, planners must not only understand the factors that motivate police generally but understand the factors that motivate specific demographic groups of police officers. Achievement of this outcome has been difficult for police managers because of the lack of available empirical information on the sources of police workplace motivation. It is acknowledged that to date research into the psychological predictors of Australian police performance has been very limited (Lough & Ryan, 2006). Researchers of police job-satisfaction and motivation have also observed that there is a lack of research, knowledge and understanding in this area generally (Beck, 1999; Bragg, 2003; Brunetto & Farr-Wharton, 2001; Howard, Donofrio & Boles, 2002; Pollock, Whitbred & Contractor, 2000). For this reason the current research helps to fill a paucity of information on the factors that motivate police and will inform police managers in their endeavours to manage an effective police service for the benefit and protection of the people of Queensland.

RESPONSES TO THE RESEARCH QUESTIONS

The research questions presented at the commencement of this study and the resultant findings follow:

- (1) What do police officers perceive as the sources of motivation in their workplace?

This research found that police are motivated by five broad factors which this study has labeled Prime Motivational Factors. They are: *Feeling Valued, Achievement, the Work Itself, Workplace Relationships* and *Pay and Conditions*.

Feeling Valued involved a sense of feeling valued and of worth to the QPS. Key elements that contributed positively to this Prime Motivational Factor were recognition of good work, appreciation of effort and time put in and promotion as an expression of recognition. Negative elements that detracted from a sense of *Feeling Valued* were managers who focus on negative feedback, undervaluing general duties police work, and the way police discipline and complaint issues are managed.

Achievement was associated with a personal sense of growth, advancement and pride. Elements that had increase motivation from this source were: personal achievements, a sense of self pride, quality training and being given additional responsibility. Elements that detracted were;

negative media reporting about police and micro management by supervisors and other managers.

Work Itself is a Prime Motivational Factor that was increased by two broad groups of elements: those associated with idealistic goals like: supporting victims, a sense of justice and building a better safer community and those involving the excitement or challenge of the job like: exciting work with an adrenaline rush, the satisfaction of doing quality work and enjoyment of the nature and variety of police work itself. There were very few negative elements that detracted from this factor other than de-motivation caused by the justice and court system itself.

Workplace Relationships in the positive sense was characterised by supportive supervisors, keen happy work colleagues and a healthy sense of respect among colleagues. Negative elements that detracted from this Prime Motivational Factor were; unsupportive supervisors, negative work mates and managers more focused on their own ambition or office politics than on getting the job done.

Pay and Conditions had positive elements nominated which were usually general comments about adequate pay. In the case of this Prime Motivational Factor most of the qualitative comments related to the negative elements of inadequate pay, work overload and faulty equipment particularly radios.

Not all the elements that constitute these Prime Motivational Factors had the same weight. Some were mentioned much more frequently and at times more emotively. In particular the importance of: recognising an

officer's work, supportive supervisors and a sense of acceptance by colleagues and the team, and disillusionment with the promotional system stood out as the most important elements. These five Prime Motivational Factors and the elements that add to and detract from them make up a model of police motivation that may assist police managers to maximise motivation in their workplaces.

(2) How do perceptions of the sources of motivation vary between different subgroups of police according to: Years of police experience; Age, Rank; Gender; and Highest educational attainment?

Overall, the variable age did not significantly impact on the motivation of police. There was however, a gradual overall decline in motivation with advancing age and the study found that as police advanced in age they were generally less motivated. The exception to this was *Pay and Conditions* which rockets up as a motivator after an initial fall from the younger group. Discussion and analysis the motivation with respect to age is limited by the categorisation of responses into three very broad groups for statistical analysis purposes. This prevented more detailed analysis of difference between generation Y, younger than 25 years and comparisons between pre and post elective retirement groups.

Motivation from the *Work Itself* had equal appeal to all ages, gender, education levels and rank. Similarly, *Workplace Relationships* is a

motivator for all age groups and no significant difference was found between ages for this motivator. It was also apparent from qualitative comments that the same elements had effect regardless of age, so that peer acceptance and supportive supervisors were mentioned by officers of all ages.

The demographic variable with the single greatest influence on police motivation was tenure. This is consistent with the findings in earlier research on police motivation (Beck, 1999; Bragg, 2003; Chiou, 2004; Featherstone, 2008; Holden, 1980) and in other industries (Oshagbemi, 2003; Shah, Crossman & Chinmetpituck., 2003). In the case of every one of the Prime Motivational Factors, levels of motivation fell sharply during the first three to six years service. For all of the Prime Motivational Factors except *Pay and Conditions* motivation continued to gradually decline with increasing tenure. Across all the Prime Motivational Factors three critical periods of tenure stood out. They were: the initial two year, 6-8 years window and the period of 19 to 24 years. The initial two years generally witnesses a dramatic drop in police motivation. Although it is easy to speculate the reasons for this has not been empirically established. The significant of this for the rest of the police officer's career and for the QPS is self evident. The periods of 6 to 8 years and 19 to 24 years both represent periods of motivational low points that justify further research.

- (3) Do the sources of workplace motivation vary significantly between the generational cohorts?

The findings of this research do not support the concept of generational cohorts. The findings are consistent with other empirical research that found different age groups to hold more values, behaviour and beliefs in common than in conflict. Generational cohort differences are not a reliable predictor of police motivation.

(4) What are the implications for the QPS?

The implication for the QPS of these findings is that a more planned approach to human resource management can be taken with consideration given to those factors that tend to motivate police in the workplace. The importance of elements also like; recognition, supportive supervisors, peer acceptance and team pride were all highlighted by this study and should be considered in future human resource planning as well as when reviewing existing plans and policies. For instance the frequency of complaints about unsupportive supervisors may cause the QPS to re-evaluate programs like the Positive Workplaces Program and re-evaluate the effectiveness of its approach as well as investigate ways to enhance peer support and an officer's identity with the organisation. The effective application of this knowledge of police sources of motivation may assist QPS managers to foster a more stimulating and motivated workplace with the beneficial effects of: increased productivity, improved mental health of officers through lowered stress, reduced turnover because officers are

happy at work, good workplace relationships and a workforce with an attitude of healthy and happy corporate culture.

In his doctoral research in 2005 with Carleton University Murphy (2005) examined the motivation of Canadian police officers to become executive officers within a large police organisation. He collected survey responses from 719 Canadian police officers which showed motivation for advancement to executive rank was driven by two themes: monetary reward and a desire to use a leadership role to make a difference. The first of these is consistent with the Prime Motivational Factor of *Pay and Conditions* and the second is very similar to the importance of strategic direction/leadership as a motivator. Murphy's (2005) 'motivation driven by a desire to make change' and observations about the motivating power of strategic direction and leadership are outcomes focused and fall within the Prime Motivational Factor of *Achievement*.

RECOMMENDATIONS

The police in this study were generally keen to provide their insights, experience and opinions on the factors that motivate them in the workplace. The factors that motivate and de-motivate police officers in Metropolitan North Region were essentially synonymous with factors that motivate and de-motivate police across jurisdictions (Beck, 1999; Bragg, 2003; Chiou, 2004; Featherstone, 2008; Holden, 1980; Murphy, 2005). This study has generated a framework of the sub-factors that motivate police and this has been analysed to produce the Prime Motivational Factor Model (Figure 22). The model can be utilised to aid human

resource managers and other senior police managers in planning to build a more positive and motivated workplace. The study also revealed information that lends itself to recommendations for further research and action as well as highlighted elements of concern.

A careful consideration of the findings of this research, lead to recommendations in the areas of Human Resource Practice Management, Retirement, Leadership Training and Future Research that follow. While it is acknowledged that some of the recommendations may need further specific investigation, the findings clearly demonstrate that they are all important to the QPS and should be considered in both policy and practical context.

HUMAN RESOURCE PRACTICE MANAGEMENT RECOMMENDATION

No. 1

It is recommended that the Prime Motivational Factor Model for Police which was developed in this study be used by QPS management as a reference tool when considering policies and orders that impact on police motivation.

HUMAN RESOURCE PRACTICE MANAGEMENT RECOMMENDATION

No. 2

It is recommended that the current policy of “civilianising” administrative positions and other positions that do not require police knowledge or the exercise

of police powers be continued and that opportunities be identified where other non-operational administrative work can be performed by administrative officers or other public servants. An example would be employing administrative assistants to enter data collected by police onto the Qprime computer data base, and thus freeing up police to perform more active police roles.

One of the clearest findings wrought from this study was that police are generally motivated from doing police work. They joined the organisation to have contact with the community, help citizens in distress and arrest felons. When asked to comment on what motivated them most from work, some officers made these responses: “Making good arrests of offenders”, “The fact that I enjoy what I do. I am a General Duties police officer and thoroughly enjoy the work that I do when I am out of the office” and “catching crooks”. It is self-evident that officer’s joined the QPS, attracted by the prospect of performing this type of work and that when administrative tasks and other burdensome procedural tasks fetter “actual police work” they become frustrated and lose motivation.

HUMAN RESOURCE PRACTICE MANAGEMENT RECOMMENDATION

No. 3

It is recommended that the QPS consider in detail how promotional processes can be amended to clearly demonstrate fairness, transparency and promotion of the best applicant. A fair promotional system that rewards effort and achievement was nominated as one of the greatest single motivational elements by participants. This is consistent with studies in other police jurisdictions (Brunetto & Farr-Wharton, 2002; Chiou, 2004; Featherstone, 2008). Chiou (2004) advocates a vigorous and fair promotion of opportunity. In the qualitative open ended

responses 13 officers wrote that the prospect of promotion motivated them.

Another 30 officers wrote that they had no confidence in the system and that the promotional processes and system served to reduce their workplace motivation.

These are some examples of comments made:

By a commissioned officer:

The organisation is creating a culture that, in order to progress, the officer needs to "cultivate" a member of the senior executive to lobby on their behalf. The organisation's actions with regard to concern for the employee are conveyed in policy but the reality does not match the rhetoric.

A sergeant with 30 years experience wrote:

I have always been motivated to do a good job but the promotion system has caused me great distress. It is very unfair. The merit based promotion system is a joke. A persons experience means nothing.

It is apparent from the data collected that perceptions about the promotional processes have strong de-motivating influences. The perceptions relate to both the competence and the independence of the processes. Factor analysis in this study show that police considered promotion as recognition by the organisation of the individual's value and closely tied to the dominant element to emerge in this study, recognition. The improvement of current promotional processes to reflect process that is fairer and visibly independent will reduce much of the current job-dissatisfaction and de-motivation created by current promotional policy and practice.

RETIREMENT POLICY RECOMMENDATION No. 1

It is recommended that consideration be given to the introduction of an optional retirement at 20 years service. The graphs of motivation levels against the demographics of tenure demonstrate a dramatic fall in motivation over the first two to three years followed generally by a gradual decline for the rest of the officer's career. The graphs of age for most Prime Motivational Factors show this common trend of decreasing motivation. The one Prime Motivational Factor that is an exception to the pattern is *Pay and Conditions* which jumped significantly at 24 years. The graph of motivation from *Pay and Conditions* against age showed a steep climb with advancing age. For police who joined the QPS (then Queensland Police Force) prior to 1990 tenure and age are linked. A likely explanation for these patterns is that officer's who are unhappy in the QPS and are unmotivated wait until 55 years of age and elect early retirement leaving behind a more motivated and committed group of 55 to 60 year olds. As this group is about to retire in five years or less each officer's superannuation and retirement savings is extremely important to him or her therefore the Prime Motivational Factor *Pay and Conditions* jumps to a higher level of importance as a motivator for this group. Just as high levels of motivation have been linked to productivity, low levels of motivation have been linked to poor productivity and a negative impact on other employees and the workplace (Beck, 1999). For this reason it is in the interests of the QPS to permit officers who are no longer motivated in their work to elect to take an early retirement at 20 years service. This has also been suggested by some officers in the open qualitative comments of the questionnaire. Chiou (2004) in his study of Taiwanese police also recommended the option of retirement at 20 years service.

RETIREMENT POLICY RECOMMENDATION No. 2

It is recommended that consideration be given to increasing the compulsory retirement age of police beyond 60 years of age. As previously discussed those police who do choose to remain after the early retirement option of 55 years are likely to have much greater motivational levels for all Prime Motivational Factors except *Workplace Relationships*. The current high employment environment has produced a shortage of skilled and experienced police and the QPS like other policing jurisdictions is pressed to find adequate numbers of suitable recruits (Brunetto & Farr-Wharton, 2003; Lynch, 2005; Murphy, 2005). Since the police in the demographic older than 42 years show general high levels of motivation that should be commensurate with high levels of experience and skill it is in the interests of the QPS to retain the employment of these officers beyond 60 years of age wherever the officers are still fit for duty. In such a case offering specific contracts of extension to particular officers is a possibility.

LEADERSHIP TRAINING RECOMMENDATION

It is recommended that the QPS introduce leadership training with a focus on transformational leadership and communication for police at all levels. The

Prime Motivational Factor, *Feeling Valued* was also clearly identified as a factor that has a strong motivating influence across all demographic factors and was not only clearly identified in the statistical data but was frequently referred to in both positive and negative terms in the qualitative comments. Many officers referred to the powerful motivating effect a supportive encouraging supervisor had on them. Still more made reference to the fact that their work motivation had suffered due to unsupportive supervisors and managers. Numerous police also mentioned that lack of recognition for work well done and extra effort as well as undervaluing their work had seriously de-motivated them. One Senior Constable commented: “I am most motivated to do good work by recognition for work done well. Supervisors and others that notice when you are working hard”. A sergeant with 20 years experience wrote: “I am encouraged to strive to be my best by praise and responsibility.”

This result is consistent with numerous earlier studies of Queensland police (Bragg, 2003; Brunetto and Farr-Wharton, 2002, Steinberg, *et al.*, 1994) and other jurisdictions (Beck, 1999; Chiou, 2004; Featherstone, 2008; Holden, 1980; Loo, 2004; Winfree, 1999). Despite the Out-of-the Blues Project, the Positive Workplaces Program and the Negative Work Practices Workshops which the QPS has conducted over a number of years there is still a clear need to purposefully develop transformational supportive leadership skills in QPS managers and supervisors at all levels. This result shows the significance for the organisation of nurturing a culture of team leaders who adopt a non-authoritarian style, communicate frequently with staff and place high importance on providing positive feedback and recognition.

FUTURE RESEARCH RECOMMENDATION No. 1

It is recommended that further research be conducted to understand the causal factors for the plummet of motivational levels during an officer's first three years. This phenomenon is not limited to Metropolitan North Region or to Queensland but has been found in other domestic and international jurisdictions (Beck, 1999, Brunetto & Farr-Wharton 2003, Chiou, 2004; Featherstone, 2008; Holden, 1980; Murphy, 2005). Anecdotal evidence also suggests this pattern applies to some other public service professions like paramedics and teachers. Identification of the specific factors detracting from this group's motivation levels may assist QPS managers to build longer lasting motivational strategies into recruit training and to manage the workplace in a way that maximises the motivation levels and helps preservation of motivation levels of new constables. If factors like unrealistic and over idealistic perceptions of police work and community interaction, which have significantly contributed to this, can be addressed by amending academy training. On the other hand if perceptions of lack of managerial support or organisational culture are at the root of this change then training of managers and careful workplace selection may be strategies to consider.

FUTURE RESEARCH RECOMMENDATION No. 2

It is recommended that the QPS investigate strategies to enhance a sense of spirit de corps and of respected membership in a professional team. Police across

all demographic groups commented that they were motivated by being members of a professional team and being respected by their peers and supervisors. A Senior Constable commented that she/he was motivated “To be a valued member of the team”. Initiatives like the police sergeant’s mess and the commissioned officer’s mess help contribute to this collegiate culture in a healthy way. In his doctoral study of Queensland police, Marcus (2008) found that a perception of “worth and belonging” was a major factor that encouraged police to remain after the option of early retirement. The qualitative comments from officers of all ranks, and tenures echoed frequent similar comments about the personal importance of being accepted and respected by their colleagues and having pride in their team. This tended to be a universal comment.

FUTURE RESEARCH RECOMMENDATION No. 3

It is recommended that the instrument be further developed and that the rated responses to Herzberg, Mausner and Synderman’s (1959) sub-factors in Part 3 be replaced by responses to appropriate statements. This research has validated the use of the survey instrument which was built on the survey questionnaire used in Chiou’s (2004) study. The inclusion of a third bank of questions asked officers to rate on a scale of 1 to 5 how much each of the Herzberg et al.’s sub-factors listed motivated them. The intention of the third bank of questions was to strengthen the reliability of analysis of data by providing a broader data for each Herzberg et al. sub-factor by ensuring that each sub-factor has at least 3 questions. Asking officers to respond to a single word describing a Herzberg et al. sub-factor was intended to make this part of the questionnaire user friendly and quick and

thus encourage a high response rate. It was noted during analysis of the data that a number of respondents tended to tick down the column for this section giving mostly responses of 3 or 4. In a number of these cases when the equivalent response to the statement about the same sub-factor in the earlier part of the questionnaire was compared the response was different to that given in part 3. One explanation for this is that near the end of the survey officers answered the rating questions by simply indicating their general level of motivation not stopping to consider how motivated they were by each of these sub-factors individually. If this was the case then the validity of the data collected in this section would have been weakened to some degree.

LIMITATIONS OF THE STUDY

Conclusions about the general application of a demographic variable to a particular Prime Motivational Factor are not detailed enough to determine whether different subgroups are motivated by different elements. Different demographic groupings may be motivated by different elements even though the general level of motivation across a Prime Motivational Factor may be similar. For instance the *Work Itself* did not show any significant difference across different age groups. The conclusion however does reveal whether all age groups are motivated by the same type of work or whether different elements of work motivate people at different ages. This is one limitation of the present study.

The questionnaire sought personal perspectives on the key factors that operate to motivate police in the workplace. This required subjective analysis on

the part of the participant. It relied to some degree on the honesty of the participant's response. Data collection on sources of police motivation was limited to police in Metropolitan North Region. Any significance of this data for the QPS as a whole is based on the presumption that police in Metropolitan North Region are representative of police throughout the State and limited by the extent to which the response group was representative of QPS police generally.

Another possible conceptual limitation is built into the methodology. The conceptual model that underlines this research is Herzberg, Mausner and Synderman's '(1959) Two-Factor Theory. Findings and discussion may therefore limit the outcomes derived from these sub-factors. If some other important sub-factors not identified by Herzberg et al. exist their identification would be expected to emerge from the qualitative data. The identification of any such additional sub-factors may be limited by the brevity of the qualitative comments.

CONCLUSION

Research of worker motivation declined after the 1960s in favour of the other studies of workplace psychology and an understanding of police motivation in particular had been largely neglected until the last decade. The last decade has witnessed a renewed interest in understanding police motivation through applying classic theories that had never been applied previously to police or by using more recent theoretical models. An understanding of the complex dynamics of police workplace motivation is emerging but is still in its infancy. This research has

helped contribute to that process and the body of knowledge on police motivation that is slowly building.

There is need to continue refining research instruments including the one used in this study to remove any ambiguities that may emerge so that it can deliver more precise data on the specifics of police motivation. Information on police motivation must distinguish between an individual's inherent motivation and motivation resultant from a particular current work environment. Effective planning and people management needs information that is detailed and specific.

Future research in the area must move beyond just the content approach to motivational theory so that managers must apply knowledge already possessed in their workplace and further advance the application and practice of that knowledge through action research. The current study is unique in its specific focus on police motivation and has provided a useful model and useful information for Human Resource Managers and other police managers to enhance levels of officer motivation. If this is achieved the police workplace will be a more motivated, happier and healthier one and the Queensland public the ultimate beneficiaries.

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Legislation List

Police Service Administration (Discipline) Regulation 1990

Public Service Act 1996

Appendix A

Previous Studies Based on Herzberg's Methodology

Adapted and amended from the Doctoral Dissertation

***An Empirical Study of the significant workforce
motivational attributes, based on Herzberg's two factor
theory, tailored to the existing culture and functions within
an organization***

**by Joseph Costa
The University of Alabama, 2003**

Author	Year	Population (No.)	Purpose	Methods	Findings
Herzberg, Mausner & Synderman	1959	Engineers & Accountants (203)	Study job motivation and provide new insights into the nature and method of operation of job attitudes.	One-on-one interview based on pre-defined open ended questions. Answer then categorized into thought patterns reflecting 16 primary attributes.	There are 2 distinct set of factors affecting job attitudes. Those that promote positive attitudes: motivators and those that promote negative ones; hygienes.
Friedlander	1963	Professionals-Manufacturing Firm	To determine if different categories of workers respond differently to specific features of the job environment regarding satisfaction.	A questionnaire was administered within a large Midwestern manufacturing company to its engineering, supervisory and salaried personnel. 200 from each category were selected the completed surveys at random. Thirty nine questions were used to form 3 separate tests. Seventeen of these measured the importance of various items to the employees satisfaction. An additional 17 measured the actual satisfaction of the employees with the same items, and 5 separate items measured the overall satisfaction of the employees.	Differences were found in responses based on age, salary and occupational patterns within the three groupings of motivational factors: Social and Technical environment, Intrinsic self-actuated work aspects and recognition through advancement. No significant differences were found in overall satisfaction.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Schwartz et AL.	1963	Supervisors – Public utility (111)	To validate results previously attained by Herzberg	Followed Herzberg's technique, except for the following: Respondents were asked to write their experiences rather than state them orally as in an interview. The responses were then scored on the 16 first level factors only. Other omissions were also made such as asking for duration and effects. Edwards personal preference schedule was also utilized to help clarify the meaning of the variables.	Remarkable degree of homogeneity, but there were differences in specific values of the factors and their ranking. One factor, Interpersonal relationship with subordinates showed significant reversal in the predicted direction.
Myers	1964	Randomly selected employees across all levels of Texas Instruments (282)	To test the Two-Factor Theory and provide insights into motivation of workers at TI. Purpose to use this information to improve motivation.	Followed classic model and face to face interview of Herzberg	Clear validation of 2 distinct factors operating in workplace motivation. A comprehensive model further refining Herzberg's model was designed. The study highlighted the importance of the supervisor's influence on subordinate motivation and productivity.
Friedlander	1966	Government Civil Service Workers (1,468)	To determine the importance of work versus non-work among socially and occupationally stratified groups.	An anonymous questionnaire was sent to the homes of target group members. Each of the 1468 respondents was categorized into one of two occupational groups and one of three status groups.	Significant differences were found white and blue collar workers in relative value of the factors. Relative blue of factors correlates with occupational levels (blue and white collar). No significant differences within the occupational levels status groups.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Centers & Bugental	1966	Cross section of workers (692)	To determine extent to which extrinsic or intrinsic job components were valued was related to occupational level.	Person to person interviews were conducted in the participant's home. The respondent was asked to name his/her first 3 choices from a list of 10 different kinds of jobs (i.e. a job where you could help other people). Respondents were then asked which of these things was most important in keeping them in their present job. They listed statements indicate of extrinsic and intrinsic motivators (i.e. , pay, being an extrinsic motivator per Herzberg).	Job motivations were found to have the expected relationships to the occupational level. At higher occupational levels the intrinsic components were more valued. Women placed a higher value on "good co-workers", men on "opportunity to use talent or skill".
Weissenberg & Gruenfeld	1968	Civil Service Supervisors (96)	To investigate the relationship between motivator and hygiene satisfaction variables to job involvement.	A questionnaire was distributed and each participant was allowed one week to complete it. The questionnaires were collected at group sessions during which research instruments for another study were being administered. Precautions for anonymity were observed. Wernimont's scale, which was derived from Herzberg's model was used in this forced choice study.	Motivator but not hygiene satisfaction variables correlated with job involvement. In addition, total motivator satisfaction scores accounted for considerably more variance in overall job satisfaction than did hygiene variables.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Moore & Leo	1989	Child Welfare Professionals	To explore the quality of life and its influence on voluntary turnover and delivery services. Herzberg's theory was used to investigate worker attitudes and job enrichment interventions.	Two of eight units selected as experimentals with the remaining six as controls. Each worker completed Herzbergs 16 item job reaction survey of motivational task content, plus 2 narrative questions asking them to list 5 factors contributing most to their contentment with child welfare work. Unit effectiveness was measured separately, as well as turnover rates. Pre-test and Post-test data was gathered, with the test being a job enrichment intervention to increase satisfaction.	Overall applicability to Herzberg's theory was shown: motivators and hygienes were clearly differentiated. Among groups citing high or low proportions of motivators or hygienes, no significant differences occurred between these proportions and changes among job satisfaction measures taken before or after treatment. "Leavers" differed significantly from "stayers" in their pre-test intentions to quit, and acted on their stated intention. 'Working conditions" and "Agency policy administration" significantly influenced caseworker discontentment. "Work itself" and "Achievement" were the main contentment sources. The intervention was limited to 3 months preventing full evaluation. However the findings showed good support for the M-H theory as a reasonable basis for interpreting caseworker attitudes towards work. Several proposals for enhancing worker attitudes, reducing turnover, and improving performance were developed.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Coletta	1981	Registered Staff Nurses (10)	To identify the factors which registered nurses perceived as leading to job satisfaction and dissatisfaction, and determine their effects on performance, attitude, mental health, interpersonal relations and turnover.	Tape recorded interviews utilizing Herzberg's semi-structured interview guide were used. Content analysis was performed according to Herzberg's coding scheme.	Supported Herzberg's theory. Achievement and work itself were the key factors contributing to job satisfaction. Supervision-technical, interpersonal relations- peers, and working conditions were the primary leading to job dissatisfaction. Feelings of achievement, recognition and pride were associated with job satisfaction, while unfairness was the predominant feeling associated with dissatisfaction. The effects of job satisfaction were an increase in quality of care while job dissatisfaction resulted increased turnover and psychosomatic complaints, but not a decrease in quality of care. The findings of the study highlighted the important role of supervisory nurses in helping to alleviate the nurse manpower shortage. In order to decrease sources of dissatisfaction and to increase sources of satisfaction (and their positive effects on the performance and attitudes of the nurses) several recommendations were made.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Murray	1983	Nurse faculty in Baccalaureate Nursing programs	To identify characteristics which influenced job satisfaction and dissatisfaction to derive information to improve selection, retention and productivity.	Modified version of the Herzberg job satisfaction questionnaire (utilizing a four alternate Likert type scale to measure the satisfaction level with each of the 29 intrinsic and extrinsic characteristics of a nurse-faculty position. Demographic data was also obtained.	All of the job characteristics affected both satisfaction and dissatisfaction. The nurse-faculty experienced a feeling of job satisfaction overall, despite reported dissatisfaction with many job characteristics. Teaching activities outranked research and publication as preference of most of the nurse-faculty.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Herbert	1983	Chicago Special Education Teachers (112)	To investigate the effectiveness of supervisory behaviour of special education supervisors as perceived by the teachers.	Teachers in the North Shore suburbs of Chicago were asked to relate incidents of effective and ineffective supervisory behaviour. Respondents also listed preferred professional competencies and personality characteristics of the supervisor. Ten special education supervisors participated in an in-depth interview.	Motivation factors were more strongly associated with effective supervisory behaviour. The factors of achievement and recognition contributed more to effective than to ineffective supervisory behaviour. Hygiene factors were associated with ineffective supervisory behaviour more often than effective supervisory behaviour. Teacher's perception of effective and ineffective supervisory behaviour was influenced by number of years of teaching, experience, and teaching area. The supervisors' professional competencies were found to be more important than their personality characteristics. The supervisors expressed frustration with the lack of a clear cut role conceptualisation. Expectations were too diverse and impeded the supervisor's role identity. The supervisors also expressed a desire for more training in areas of time management, interpersonal communication and group dynamics.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Munro	1983	Enrolled Nurses (329)	To validate Herzberg's two factor theory	Participants completed a mail out questionnaire. Items reviewed matched M-H factors of Two Factor Theory	The study identified the importance of challenging work for job satisfaction. Working conditions and another 3 hygiene factors were also identified as motivators.
Fearnow	1984	Community College Faculty (86)	To compare the job satisfaction and dissatisfaction of community college faculty under four and five day workweeks.	A job satisfaction scale was used to measure the effect of a compressed workweek on the attitudes of instructionally oriented community college faculty. The Hotelling T Square statistic was used to determine the equality of the means of selected groups across eight job factors. (Herzberg's M-H factors). Factors included: achievement, growth, responsibility, work itself, interpersonal relations, salary, supervision and working conditions.	Faculty did not express significant differences in opinions concerning satisfaction and dissatisfaction under four and five-day workweeks, except to indicate a more positive response to the growth factor under the four day workweek. Job satisfaction and dissatisfaction did not vary by sex or age for either four or five day workweeks. Job satisfaction was higher for faculty who has experienced alternative workweeks compared to faculty who had always worked the five day workweek. Instructional methods of faculty did not differ for either the four or five-day work week.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Holden	1884	Sam Houston University study of 150 Houston patrol officers.	Identify elements of the police occupation which lead to job satisfaction/dissatisfaction.	Holden developed a 32 item questionnaire based on Herzberg's theory	Significant relationships were found but they were insufficiently strong to be meaningful.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Stembridge	1984	Teachers in Seventh-Day Adventist Colleges	To determine motivating factors, if the factors are different for private vs. public university teachers, and what factors might influence teachers to accept an appointment at an Adventist College.	Respondents asked to describe positive or negative incidents that related to their jobs as teachers and to answer 20 forced-choice-structured questions to indicate their level of satisfaction or dissatisfaction. The critical incidents were coded in within a set of categories adapted from Herzberg. Chi-squares were used to test for relationships between subgroups.	There were more incidents of satisfaction than dissatisfaction. Achievements and recognition combined for 50 percent of the satisfying incidents. System/college policy and administration and interpersonal relations-peers and staff combined for 47 percent of the dissatisfying events. Commitment to service influences teachers in decisions to accept an appointment to teach at an Adventist college. Besides supporting Herzberg's Two-Factor Theory, several conclusions were reached, e.g. administrators who work towards creating good experiences in achievement and recognition will be providing a work climate that stimulates positive motivation. And factors that motivate or dissatisfy teachers in public universities or Adventist Colleges are essentially the same. There exists a need for more effective communication in order to promote unity among faculty members. Also although commitment to service ranks first as an influence for teachers to accept an appointment, possibility of growth was found to be more important for teachers of junior age, degree, rank and teaching experience.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Allison	1985	Special Education Supervisors (32)	To determine factors that contribute to job satisfaction and dissatisfaction of special education supervisors, influence of factors on job performance, and prevalence of factors in the supervisor's job situations. Differences along two demographic variables, sex and extent of contribution to household income were examined.	An instrument was developed for the study presenting satisfying and dissatisfying job incident statements, one for each of the 16 factors identified by Herzberg's original study. The participants were asked to rank the satisfying incidents along 3 scales: most to least job satisfaction, influence on increasing job performance, and likely to occur in current job situation. The dissatisfying incidents were also to be rated along 3 scales in a similar fashion.	Motivators as a group were significantly greater indicators of satisfaction and were perceived to have a significantly greater influence on increasing job performance. However neither hygienes nor motivators as a group were significantly greater indicators of job dissatisfaction. Achievement, responsibility, work itself, personal factors and interpersonal relations – subordinate were the most predicted factors of job satisfaction. No significant differences were found between male and female.
Borges	1985	Teachers(130)	To determine the extent Herzberg's M-H factors contributed to Virginia's teachers' decisions to leave the profession and include the effect of any demographic relationships.	All participants completed a questionnaire designed to collect demographic data and determine the extent to which each of the Herzberg's 16 Motivation-Hygiene factors contributed to their decision to leave teaching.	Salary, opportunities for advancement and personal growth ranked first with regard to the extent to which Herzberg's factors contributed to their decisions to leave teaching, and the relationships with peers and security ranked last. No significant difference s in responses to the Herzberg's factors were revealed as a function of marital status, years of education, age and years of experience, numbers of dependents, subjects taught, etc. Significant differences were revealed with respect to sex, school system type, and grade levels taught.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Park	1986	Public Employees-US/Korean (100/100)	To determine if generalizations can be made in regard to what motivates employees to work from one society to another.	Personal interviews and self-administered surveys were collected from the subjects with considerable attention to the influence of organisational culture upon the formulation of work motivation.	Similar findings to Herzberg were revealed with some small differences in amounts and order of factors. Speculations are offered for the similarities in the outcomes from two distinctly different socio-economic settings.
Scott	1986	Elementary School Teachers (40)	To determine motivation factors and any differences in responses from the various subgroups of teachers.	A tape recorded interview, utilizing the critical incident technique was used to collect data. Through content analysis the investigator and two independent coders classified the factors and effects. Respondents were then separated into subgroups and their responses were statistically analysed.	Achievement; recognition and interpersonal relations with peers, parents, and other adults significantly affected positive teacher motivation. Interpersonal relations with peers, parents and other adults; interpersonal relations with principal; district school policy and administration; and discipline significantly affected negative teacher motivation. Subgroups tended not to differ significantly in their responses to sources of positive and negative motivation. Teachers are not motivated by tangible factors but by intangible factors that deal with their emotional well being. If principals are to motivate teachers, they must know them and their work. Principals can be most effective by setting high expectations for accomplishment of organizational goals and reinforcing teacher's efforts.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Taylor	1986	Public School Staff in Florida (586)	To survey certified staff of Florida public elementary schools to determine how elements of Herzberg's Motivation-Hygiene Theory were perceived as being met in their current school employment.	An instrument was designed to allow subjects to mark each job factor (Herzberg's 16) as contributing to their job satisfaction, neutral or dissatisfaction. The instrument also has areas to record various biographical data on the subjects.	The job factors of achievement and interpersonal relationships with students were perceived by over 90% of the subjects as contributing to their job satisfaction. Significant differences between male and female were found regarding the motivational factor of responsibility. Subjects with the most years of teaching experience tended to have more members that perceived job factors as contributing to their satisfaction than subjects with lesser years of experience.
Thongchant	1987	Faculty Members of Nursing Colleges in Thailand (408)	To investigate job satisfaction based on Herzberg's Two-Factor Theory and using Olin-Wood Faculty Job Satisfaction scale.	Investigation was based on 10 of job satisfaction factors selected from Herzberg's M-H theory. The questionnaire consisted of 68 items using a 6 point rating scale of 10 factors.	Nursing faculty members were satisfied with their job within rank order of importance: work itself, responsibility, interpersonal relations, recognition, achievement, supervision, policy and administration, growth, working conditions and salary factors. Variables such as working position, programs of teaching, age, salary, and length of service contributed significantly to job satisfaction.
Brandes-Tyler	1987	California School Administrators (153)	To examine and compare the differences between men and women school administrators in motivation to become managers.	Participants were asked to respond to a survey instrument classifying five motivational need systems according to a synthesis of Maslow's Need Hierarchy model and Herzberg's Motivator-Hygiene Theory.	Women scored significantly higher than men regarding their self-actualisation needs, and non-whites scored significantly higher in security needs. There were also significant differences found between younger and older administrators in basic need scores.

Author	Year	Population (No.)	Purpose	Methodology	Findings
McNeil	1987	High School Teachers	To determine if there was sufficient difference in attitude toward teaching between those who were and those who were not in a career/ladder merit pay pilot program.	An "attitudes towards teaching" questionnaire was mailed to a sampling of teachers who were participating in a career ladder/merit pay point program and a sampling of teachers who were not involved in the program. The data gathered was computer analysed utilizing the Special Package for Social Sciences using the procedures for frequencies, reliability, factor analysis and multiple regression.	The career ladder/merit pay point program was not an effective motivation tool for high school teachers.
Bemis	1988	Physical Therapists and Physical Therapy Faculty Members (292/201)	To identify factors that might serve to motivate physical therapy clinicians to become faculty members.	Separate 54-item forced-choice questionnaires (one for each sample group) were used to identify factors that served as a source of satisfaction in the subject's role as a clinician or faculty member, and in the clinician's view of performing in the academic role. The subjects were asked to rank , using a 4 point scale from no influence to greatest influence each of the 14 factors' (Herzberg's) influence upon attraction to the faculty role.	Both physical therapists and physical therapy faculty demonstrated a high degree of satisfaction in their respective roles. Physical therapists, as a group, indicated they would be highly satisfied in performing the faculty role. Interpersonal relations with students functioned as a significant source of satisfaction for both groups. Both groups rejected increased levels of responsibility as a source of satisfaction. Physical therapists and physical therapy faculty both viewed the characteristics of the work of a faculty member and opportunity for professional growth as having the greatest influence upon attraction to the faculty role. Degree level, salary, employment status, gender and current part time teaching affected physical therapy clinicians' selection of factors indicating satisfaction. Only gender affected physical therapy faculty members' selection of factors indicating dissatisfaction.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Rasmussen	1990	School Principals (33)	To identify factors perceived by middle school principals as contributing to their job satisfaction and dissatisfaction. Designed to apply Herzberg's M-H Theory to determine how work related events cause satisfaction or dissatisfaction.	Data was collected through interviews with selected participants. A modified Herzberg semi-structured interview was utilised. Prior to the interview a demographic sheet was completed identifying age, sex, years of experience, size of school and district. Responses were recorded and tabulated by three graders. A Chi Square test for goodness of fit were used to analyse the data.	Motivators of achievement, recognition, work itself, advancement and responsibility were the greatest indicators of job satisfaction. Hygiene factors of working conditions, interpersonal relations, company policy and administration, supervision, salary, status and job security were the greater indicators of job dissatisfaction. No significant differences were found by age, experience or sex.
Mort	1992	Library Staff	To identify factors motivating library staff and examine relationship between motivators and demographic characteristics of staff.	A combination of interview and survey was used to conduct the exploratory study of the support staff in a single large university library. Interviews of a random sample of the study population were conducted to determine what motivators academic library staff valued. A survey administered to the study population respondents to rate the value they placed on each of the 16 motivators on a 7 point scale.	Sixteen motivators were identified and arranged in a ranked list based on the mean score of the values assigned each motivator by the respondents. The motivators "using skills and abilities" and "intellectual challenge and stimulation" ranked first and second respectively. T tests revealed that the demographic attributes enrollment in library science courses, length of time in current position, salary, location of job, and area of service were closely associated with certain motivators.
Bell	1993	Registered Nurses (140)	To investigate job satisfaction and dissatisfaction of nurses at different levels of clinical practice.	Two surveys were administered one was Sluyter and Mukherjee's Job Satisfaction Survey and the other a questionnaire developed by the researcher following Herzberg's principles.	Overall all three groups had similar levels of job satisfaction but the study revealed that there were statistically significant differences between which key factor impacted on motivation.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Rantz, Scott & Porter	1996	Primary Health Care Workers (38)	To explore employee motivation and describe changes in key motivational factors since Herzberg's study.	Semi structured interviews derived from Herzberg's original work.	Results were similar to Herzberg's with Recognition, work itself and responsibility the most frequently cited factors.
Dowell	1997	Georgia High School Students (10)	To examine the factors that influence academic success	Herzberg's interview process was used, the researcher asked the participants to discuss two critical incidents, one satisfying and one dissatisfying, that they experienced in school.	The study supported the notion that a program for resilient, at-risk students provide the hope and encouragement educators need to move forward to reduce the dropout rate in schools.
Tsai	1997	Policewomen and Female Civilian Workers (419)	To examine female police employee perceptions of job satisfaction, and develop policy implications for retention of employees. Motivation factors of female civilian workers were also compared to the policewomen.	Secondary data from a survey of female personal conducted by Myers (1996) was used. The data was then analysed to determine differences in perceptions of satisfaction between police women and female civilian personnel, as well as controlling for relevant demographics.	Sworn officers were not different from non-sworn officers regarding retention. Differences were found in certain groups even though respondents were generally satisfied with the agency. There were different perceptions on some scales of motivation and hygiene factors. Respondents who were sworn officers were more likely than non-sworn officers to feel dissatisfaction with advancement opportunities, departmental policies and administration, and security. They were also more likely to be satisfied with achievement, recognition, and interpersonal relations.

Author	Year	Population (No.)	Purpose	Methodology	Findings
Turner et al.	1998	Managers-Project/Functional (31)	To determine if there is significant difference in job satisfaction among project managers and functional managers in a matrix organization.	A two-part questionnaire was used. The first part asked about organizational structure and the second part approximated Herzberg's interview technique.	The functional managers dissatisfying experience contained over two times as many mentions of hygiene factors, as did the project managers. If knowledge workers failed to experience job satisfaction, it is reasonable to expect that productivity might be affected or at least their enthusiasm for their work hindered. The proportion of functional managers who expressed job satisfaction was lower than for project managers. The lower level of job satisfaction reported by the functional managers is related to the large numbers of negative hygiene factors they experienced. Recommendations were then made on how to improve satisfaction and dissatisfaction.
Graham	1998	226 elementary, middle school and high school principals responded	To investigate the relationship of factors such as gender, size of enrollment, and years of experience to school principal satisfaction.	A survey sample of mid-Western USA principals was mailed to 500 principals. Based on Herzberg's theory it examined 8 components of job satisfaction.	The study found that principals were generally satisfied with their current job, colleagues/co-workers and levels of responsibility. They were less satisfied with pay, opportunities for advancement and fringe benefits.
Zhang & Von Dran	1999	University students (37)	To investigate website design factors and their impact from a theoretical perspective.	The research applied Herzberg's Two-Factor Theory to determine the causes of website user satisfaction and dissatisfaction. Participants were given lists of factor impacting on wed design and asked to classify the factors and rank them.	The results wee similar to that found by Herzberg in his original study. M-H factors in the Web environment were able to be identified and allowed the designers to purposefully build motivators into the website.

Author	Year	Population (No.)	Purpose	Methodology	Findings
	2000	Employees from Turkey, Nigeria, Britain and Cyprus at different levels (136)	To describe and evaluate M-H factors and validate the Two-Factor Theory in cross cultural environments		Across all groups similar responses were received in regard to motivators but hygiens were different across the 4 groups with Nigeria having the greatest difference from the other cultures.
Dunbar	2002	Allied Health Workers (57)	To explore motivational factors among occupational and physical therapists working in a variety of settings.	Combined Herzberg's Two Factor Theory and Theory of Constraints as a model. Used Work Motivation Inventory questionnaire to collect data.	Results indicated no statistical differences regarding motivational factors between managers and subordinates, occupational and physical therapists, or by geographical regions.
Costa	2003	(340)	To compare employee motivational factors across two very different types of organisations.	Utilised Herzberg's classic technique. Interviewed participants face to face using Herzberg's 14 specific questions.	Tested a number of hypothesis and concluded by making a recommendations for both organisations in terms of managing employee motivation. The study found significant differences in employee motivational factors between both organizations.
Ruthankoon & Ogunlana	2003	323 Thai hotel employees.	To examine whether age and tenure are individual determinants of satisfaction, or whether there is an interaction between the two.	Applied Herzberg factors in a self-administered questionnaire which was distributed to staff at the hotels.	Results indicated that employee age is not significantly associated with overall job satisfaction but that tenure is.

Author	Year	Population (No.)	Purpose	Methodology	Findings
White	2004	Teachers of 5 schools in the Philadelphia Public School District	To examine the perspectives of teachers in respect to Job satisfaction and determine whether job satisfaction is related to: gender, age, years of experience or education. Also to compare restructured and non-restructured schools.	A qualitative study using a model combining theories of Maslow and Herzberg and utilizing a teacher job satisfaction questionnaire based on these theories.	
Welch	2004	All superintendants in the State of Virginia.	To examine the job satisfaction, motivation, and stress with the school system superintendancy using Herzberg's Two-factor theory	A 30 item questionnaire was sent to all district school superintendants in the State of Virginia. Demographics of gender, age, education and race were also asked.	Validated Herzberg's Two factor theory with the sub-factors identified by Herzberg present in the workplace. A significant relationship was found between responsibility and stress. Lack of recognition was also found to be a major hygiene factor.
Chiou, Jiunn-cherng	2005	680 Taiwan police officers	To identify elements that may lead to job-satisfaction/dissatisfaction within Taiwan's police organisation	Used Herzberg's theory. Used a Likert scale questionnaire and telephone interviews of 680 officers	Findings supported 2 factor theory. Age and salary were significant motivators. Younger officers felt more dissatisfaction.
Bassett-Jones & Lloyd	2005	3,200 responses	A survey questionnaire was distributed across government, utilities, services, retail, financial services, manufacturing and police organisations.	Used Herzberg's Theory to design a questionnaire to investigate what motivates employees to contribute ideas.	The study validated the two-factor theory and concluded that motivator factors are more inclined to cause an employee to volunteer ideas than hygiene factors.

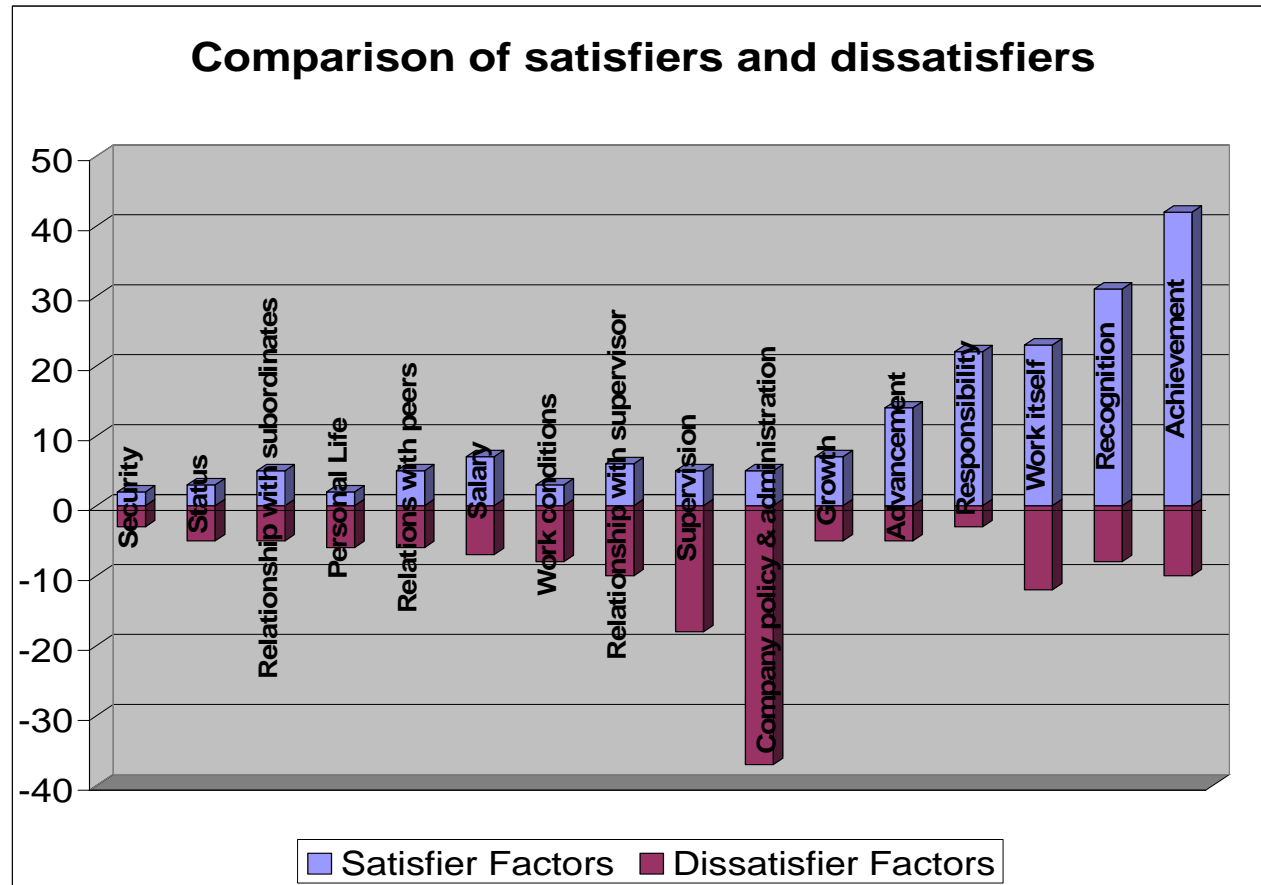
Author	Year	Population (No.)	Purpose	Methodology	Findings
Quizon-Guatno	2006	8 Nurses	In depth interviews with 8 nurses in this qualitative research	Doctoral study to find the factors that lead to work satisfaction for nurses employed by Veterans affairs.	Findings were consistent with Herzberg's dual factor theory.
Worley	2006	Subjects at 23 community colleges.	Focussed on 5 of Herzberg's satisfaction factors to compare levels of job satisfaction and dissatisfaction according to gender of Senior Administrators in Virginia Community colleges.	Site for study were 23 Virginia community colleges. Further details of the research methods were not found. This was a doctoral study at East Tennessee State University.	Findings demonstrated a difference according to gender with males experiencing a higher level of satisfaction regarding pay, co-workers and promotion whereas there was no gender differences found with the other factors. The results of this doctoral study supported the Two-factor theory.

Appendix B

**Graphic comparison of Satisfiers and Dissatisfiers
from
Herzberg's *The Motivation to Work* (1959. p. 79).**

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Appendix C

Emailed questionnaire used in this study.

Motivation Survey

In order to accurately analyse the results of the following survey it is necessary to obtain the following information. All information provided by you is confidential and as this questionnaire is anonymous you are not asked to identify yourself.

PART 1

Demographic details						
Age group	Less than 25	25-33	34-41	42-50	51-55	Older than 55
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How many years have you been employed as a police officer?	<input type="text"/>					
Sex	Male	Female				
	<input type="checkbox"/>	<input type="checkbox"/>				
Rank	1st year Constable	<input type="checkbox"/>	Constable	<input type="checkbox"/>	S/Constable	<input type="checkbox"/>
	Sergeant	<input type="checkbox"/>	S/Sergeant	<input type="checkbox"/>	Commissioned	<input type="checkbox"/>
Highest Educational Achievement	Grade 10	<input type="checkbox"/>	High School Grade 12	<input type="checkbox"/>	Trade Qualification	<input type="checkbox"/>
	Diploma TAFE / other	<input type="checkbox"/>	University undergrad.	<input type="checkbox"/>	University Post graduate	<input type="checkbox"/>
An investigation of the status of job satisfaction / dissatisfaction						
	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree	
The equipment I work with is good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
There are many opportunities for advancement in my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
It is a privilege to be a member of this department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Generally, I am satisfied with my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
This department trusts my ability to make decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

I have a good working relationship with other officers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I complain about my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel a sense of accomplishment in doing my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like the kind of work I am doing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I receive a fair pay compared to officials from other departments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The department's education and training programs have provided me with the knowledge to become a professional in my field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am considering looking for another job outside the department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My family is proud that I am a member of this department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I prefer the work that I am doing over work in a non-police organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I understand the reasons for the department's policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When I perform outstanding work the department recognises it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel embarrassed to talk with others about my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am treated fairly when investigated regarding complaints about me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My supervisor is supportive rather than critical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel I am important to the QPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have a good chance of being promoted on my merit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The working facilities here are good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I receive a fair salary here compared to workers in other occupations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I look forward to going to work each day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The department encourages me to stay here until I reach retirement age	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am encouraged to grow as a person in this department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I feel that my job is meaningful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am liked by the people I work with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am made to feel I am an asset to this department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I like my supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am always exhausted when I go home from my office	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I agree with the department's policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am allowed to pursue personal self-fulfillment from my job	326	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am held accountable for my decisions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not like the atmosphere in my office / station / establishment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am doing the kind of work I want to do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**An investigation of the factors which are sources of motivation and demotivation to you.
(Please indicate how much the workplace factors below motivate you.)**

	No effect	Pleased but not much change	Moderately increases my drive	Highly increased drive and enthusiasm	Very highly increased drive and enthusiasm
My supervisors / superiors express appreciation for my good work and effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A sense of achievement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities for personal growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advancement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interpersonal relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competent supervision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responsibility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
QPS administrative policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The work itself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Personal life (family, community, factors)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The thing that most motivates me to do good work in my job is:	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>				
Indicate how motivated you generally feel to perform good work in your job					
Motivation					
None		Moderate		Extremely high	

Please make any other comments you would like to offer in relation to things that motivates you or demotivates you in your job as a police officer.

Appendix D

Introduction to questionnaire for Email version.

Colleague,

I am a Senior Sergeant at the Positive Workplace Program. I ask 15 minutes of your time to complete the attached questionnaire on the sources of motivation in the police workplace. This questionnaire is part of doctoral study I am undertaking at QUT. While this is private research and not conducted for the QPS it is hoped that the information you provide will assist QPS planners contribute to a happier, more satisfying work environment for officers.

All responses are confidential and participation in this survey is voluntary. For more information about this research click on the link below.

To directly access the questionnaire please click on the '*survey*' button.

Thank you for your assistance. Feel free to call me with any queries.

Vern Sommerfeldt
3364 6966

Appendix E

Introduction to questionnaire for paper version.

Colleague,

I am a Senior Sergeant currently stationed at the PROVE Program. I am completing doctoral study at QUT. My research subject is to identify those factors that motivate police in the workplace and lead to job satisfaction.

Although this is private research and not conducted by the QPS it is hoped the information you provide will assist QPS HR planners to develop workplace policies and practices that suit our people and help build a happier more satisfying work environment.

If you have not previously answered the e-mail version of this questionnaire I ask for 10 to 15 minutes of your time to complete the attached hard copy and to return it to me through the dispatch system in the attached envelope.

For more information on confidentiality, the voluntary nature of this research and other information please read the attached information sheet.

Thank you for your assistance with this research,


Vern Sommerfeldt

Appendix F
Participant Information Sheet

QUT Letterhead

Participant Information Sheet

Title of Project

Researcher Senior Sergeant Vernon Sommerfeldt

Description

This project is being undertaken as part of the degree of Doctor of Education project for Vernon Sommerfeldt.

The purpose of this project is to determine the factors in the workplace which motivate police.

The researcher requests your assistance in identifying those factors and sources of workplace motivation and job-satisfaction.

Participation

Your participation will involve a questionnaire/survey which can be completed in about 15 minutes. The questionnaire consists of 64 scale point questions and 2 short written comments.

Expected benefits

It is expected that the results of the questionnaire will assist members of the Service generally as well as aid management in planning HR policies. If QPS planners are more clearly aware of the factors that motivate officers, it is expected that this knowledge will be used to encourage a happier, more motivated work environment.

Risks

There are no identified risks associated with your participation in this project.

Confidentiality

All comments and responses are anonymous and will be treated confidentially. The names of individual persons are not required in any of the responses. Please return your response to the PROVE Program in the attached envelope.

Voluntary participation

Your participation in this project is voluntary. If you do agree to participate, you can withdraw from participation at any time during the study without comment or penalty. Your decision to participate or to decline to participate will in no way impact upon you in the workplace.

Questions / further information

Please contact the researcher on 3246 8124 if you require further information about the project, or to have any questions answered.

Concerns / complaints

Please contact the Research Ethics Officer on 3864 2340 or ethicscontact@qut.edu.au if you have any concerns or complaints about the ethical conduct of the project.

Consent

The return of the completed questionnaire is accepted as an indication of your consent to participate in this project.

Thank you for your time in completing this questionnaire.

Vernon Sommerfeldt
PROVE Program
3246 8124

Appendix G

Research Ethics Committee Approval Certificate



HUMAN ETHICS APPROVAL CERTIFICATE

The University Human Research Ethics Committee (UHREC) has approved the following project:


Project Approval Number: 0600000142
Project Title: An investigation into perceived factors which motivate police
Project Chief Investigator: Mr Vern Sommerfeldt
Other Project Staff/Students: Dr John Arthur Whitta
Category of Approval: Human Ethics Level 2
Approved Until: 9/06/2009

The ethical clearance awarded to your project is valid for three years commencing from the date of approval 9/06/2006. Recruitment, consent and data collection/experimentation cannot be conducted outside the duration of the ethical clearance for your project.

Please note that a progress report is required annually (within one calendar month of the 12 month anniversary of this approval) or on completion of your project (whichever is earlier). You will be issued a reminder around the time this report is due. The progress report proforma can be located under Forms on the University Research Ethics webpage.

Extensions to the duration of your ethical clearance within the 3-5 year limit must be made in writing and will be considered by the Chair under executive powers. Extensions beyond 5 years must be sought under a new (renewal) application.

If any details are incorrect, the Chief Investigator must advise the Research Ethics Officer in writing within 10 days of receipt of this certificate.


 Research Ethics Officer (On behalf of Chairperson, UHREC)

13/6/2006
 Date

University Human Research Ethics Committee - Information in relation to ethical clearance

The University requires that its researchers comply with:

- the University's research ethics arrangements and the QUT Code of Conduct for Research;
- the standard conditions of ethical clearance;
- any additional conditions prescribed by the UHREC;
- any relevant State / Territory or Commonwealth legislation;
- the policies and guidelines issued by the NHMRC and AVCC (including the *National Statement on Ethical Conduct in Research Involving Humans*).

**Appendix
H**

Factor Analysis Pattern Matrix

Component Matrix^a

	Component				
	1	2	3	4	5
equip	.329	-.347		.301	
advance	.585				-.322
privileg	.652				
trust	.591				
relation			-.347		.427
accomp	.589		-.454		
likework	.495		-.596		
fairpay		-.456		.439	.496
training	.614				
outside	-.437	.323			
FAMILY	.439		-.360		
WORK	.345				
policies	.594				
outstand	.566		.331		
embarrass	-.377		.336		
investig	.384		.348		
support	.457			-.618	
importan	.640	-.345			
promotion	.626				
faciliti	.510				
fairsal		-.411		.445	.528
enjoy	.619		-.373		
retire	.526				
encourage	.714				
meaning	.568		-.443		
liked					.411
asset	.677				
supervis	.384			-.608	
agreemen	.575				
fullfil	.618				
account					.345
atmosph	.482				
preferre	.524		-.479		
aprecia	.462	.538			
achieve	.675	.676			
growth	.693				
advance	.415	.574			
salary		.356			
relations	.438	.536			
supervis	.389	.578			
response	.470	.494			
admin	.464				
conditio	.438	.529			
work	.477	.435			
personal	.319	.553			
Statu	.707				

security	.401	.369		
recog	.782			