A STUDY OF FACTORS AFFECTING PARTICIPATION AND PERFORMANCE OF POLICE OFFICERS UNDERTAKING THE QUEENSLAND POLICE SERVICE'S MANAGEMENT DEVELOPMENT PROGRAM BY DISTANCE EDUCATION

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A thesis in partial fulfilment of the requirements

for the degree of Doctor of Philosophy

The work presented in this thesis is, to the best of my knowledge and belief, original, except as acknowledged in the text, and the thesis has not been submitted, either in whole or in part, for any academic award at this or any other tertiary educational institution. All research procedures reported in this thesis received approval from the Ethics Committee.

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ABSTRACT

Management education for police officers has played a significant role in the desired transformation of police services around the world from vocational to professional status. This thesis reports research that employed qualitative and quantitative data collection methods to investigate the factors affecting participation and performance of Queensland Police Service officers who undertook the Management Development Program by distance education mode.

Three phases of data collection were employed. The first phase involved interviews with facilitators of the program about their perceptions of factors that affected participation and performance of officers enrolled in the program. Data from this phase were used to develop a questionnaire with seven internally consistent scales. This questionnaire constituted the second phase of data collection and was completed by officers at the ranks of senior constable, sergeant and senior sergeant who had successfully completed at least one unit of the Management Development Program. Data gained from the questionnaire were used to investigate the relationship between an officer's characteristics and the factors that influenced participation and performance in the Management Development Program. An analysis of these data provided the basis for the development of a schedule for interviews that were conducted with the manager of the program and the head of the School of Management. Central to these two interviews were implications for the delivery of the Management Development Program as part of the Queensland Police Service's continuing education and professional development program. These interviews constituted the third phase of data collection for this study.

This study found factors that influenced the participation and performance of officers undertaking the program were their attitude to in-service professional development, how they perceived professional development, issues about their success potential, the level of personal, professional and academic support they received, the impact of aspects related

to program delivery, and discourse with facilitators of the program. A model that provides a comprehensive representation of the relationships among the variables was developed. Key recommendations derived from this study have implications for the clinical delivery of the Management Development Program. Recommendations focus on the need to market the benefits of the program to individual officers, to provide enhanced student support services, to ensure the appropriateness of the learning materials, and to establish orientation programs and assignment-writing workshops for officers. Recommendations for the Queensland Police Service include the need to market the program's importance to continuing education and professional development for officers as well as the program's contribution to ensuring officers possessed sound management skills. Recommendations focussing on human resources include ensuring that numbers of facilitators are adequate to meet the learning needs of officers and that all facilitators possess appropriate postgraduate qualifications. It is also recommended that the postgraduate level of the Management Development Program be reviewed to determine if it is the most appropriate for the needs of officers and the service.

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TABLE OF CONTENTS

PAGE

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	V
LIST OF APPENDICES	xii
LIST OF TABLES	xiii
LIST OF FIGURES	xiv
CHAPTER 1 AN OVERVIEW OF THE STUDY	1
1.1 INTRODUCTION TO THE STUDY 1.1.1 Management Education for Police	
1.1.2 Context for the Study: The Queensland Police Service	3
1.2 THE RESEARCH PROBLEM AND RESEARCH QUESTIONS	
1.2.2 Research Questions	8
1.3 RATIONALE FOR THE STUDY 1.4 SIGNIFICANCE OF THE STUDY 1.5 RESEARCH DESIGN AND STRUCTURE OF THE STUDY 1.5.1 Methodological Principles	9 9
1.5.2 Overall Design of the Study	10
1.6 THE RESEARCH SETTING 1.7 THE STRUCTURE OF THIS THESIS 1.8 CONCLUSION	11 12
CHAPTER 2 LITERATURE REVIEW	15
2.1 INTRODUCTION 2.2 DISTANCE EDUCATION 2.2.1 Introduction	15
2.2.2 Definition of Distance Education	17
2.2.3 Theoretical Perspectives of Distance Education	18
2.2.3.1 Theories of Independence and Autonomy	19
2.3.3.2 Theory of Industrialisation.	23
2.2.3.3 Theories of Interaction and Communication	25
2.2.3.4 Equivalency Theory	28

2.2.4 Synthesis of Distance Education Theories and Their Relevance to the Management Development Program of the Queensland Police Service	30
2.3 LEARNING ENVIRONMENTS FOR ADULT LEARNERS STUDYING IN THE DISTANCE EDUCATION MODE	
2.3.1 Introduction.	
2.3.2 Historical Background to Learning Environment Theory and Measurement	36
2.3.3 Recent Directions in Learning Environment Research	39
2.3.4 Elements of Learning Environments in Adult Education	40
2.3.5 Synthesis of Learning Environments for Adult Learners Studying in the Distance Education Mode	46
2.4 CONCLUSION	49
CHAPTER 3 METHODOLOGY	52
3.1 INTRODUCTION	54
3.2.2 Combined Qualitative and Quantitative Designs	
3.3 THE RESEARCH DESIGN	
3.3.1 The Overall Design of the Study	
3.3.2 Data Collection Methods	59
3.3.2.1 Phase 1 - Semi-structured Interviews	59
3.3.2.2 Phase 2 – Questionnaire	62
3.3.2.3 Phase 3 – Semi - Structured Interviews	65
3.3.3 Samples	65
3.3.3.1 Samples for Phases 1 and 3 (Semi-Structured Interviews)	65
3.3.3.2 Samples for Phase 2 (Questionnaire)	66
3.3.4 Data Analysis	67
3.3.4.1 Data Analysis for Phases 1 and 3 (Semi-Structured Interviews)	67
3.3.4.2 Data Analysis for Phase 2 (Quantitative)	69
3.3.4.3 Research Period	74
3.4 COMMENTS ON VALIDITY	
3.4.2 Qualitative Component - External Validity	
3.4.3 Quantitative Component - Internal Validity	
3 4 4 Quantitative Component - External Validity	77

3.5 CONCLUSION	79
CHAPTER 4 DEVELOPMENT OF INTERVIEW SCHEDULES ANI VALIDATION OF QUESTIONNAIRE	
4.1 INTRODUCTION	
4.2 THEORETICAL PERSPECTIVES ON THE DEVELOPMENT OF	
INTERVIEW SCHEDULES AND QUESTIONNAIRE 4.2.1 Interview Schedule for Phase 1	
4.2.2 Questionnaire Development for Phase 2	
4.2.2.1 Principles of Scale Development	
4.2.2.2 Principles of Questionnaire Construction	
4.2.3 Interview Schedule for Phase 3	
4.3 DEVELOPMENT AND VALIDATION OF INTERVIEW SCHEDULES AND QUESTIONNAIRE 4.3.1 Development and Validation of Semi-structured Interview Schedule: Phase 1	
4.3.2 Development and Validation of Questionnaire: Phase 2	89
4.3.2.1 Pilot Study	91
4.3.2.2 Refinement of Questionnaire based on Pilot Study	92
4.3.2.3 Main Study	97
4.3.3 Development of Semi-structured Interview Schedule: Phase 3	99
4.3.3.1 Interview Schedule: In-service Professional Development	.100
4.3.3.2 Interview Schedule: Policing as a Profession	.100
4.3.3.3 Interview Schedule: MDP Success Potential	.101
4.3.3.4 Interview Schedule: Student Support	.101
4.3.3.5 Interview Schedule: Clinical Program Delivery	.101
4.3.3.6 Interview Schedule: Officer-Staff Member Discourse	.102
4.3.3.7 Interview Schedule: Emotional Support	.102
4.4 CONCLUSION	.103
CHAPTER 5 RESULTS OF PHASE 1 OF STUDY	105
5.1 INTRODUCTION	
5.2 ANALYSIS OF INTERVIEW DATA 5.2.1 Organizing Data from the Six Semi-structured Interviews for Phase 1	
5.2.2 Generation of Areas of Data	
5.2.2.1 Data in Relation to Factors that Encouraged Officer Participation in the	100

	5.2.2.2 Data in Relation to Factors that Discouraged Officer Participation in the MDP	.111
4	5.2.2.3 Factors that Might Affect an Officer's Performance in the MDP	.113
	5.2.2.4 Factors that Might Influence an Officer's Termination of Enrolment in the MDP	.116
	5.2.2.5 Factors in Relation to the Provision of Student Support for Officers Enrolled in the MDP	.118
	REAS GENERATED FROM THE ANALYSIS OF DATA 1.1 Area 1: In-service Professional Development	
5.3	2.2 Area 2: Policing as a Profession	.123
5.3	3.3 Area 3: MDP Success Potential	.124
5.3	.4 Area 4: Student Support	.125
5.3	5.5 Area 5: Clinical Program Delivery	.126
5.4 C	ONCLUSION	.127
СНАР	TER 6 RESULTS OF PHASE 2 OF STUDY	129
	NTRODUCTION	.129
	ACTORS AFFECTING PARTICIPATION AND PERFORMANCE OF ICERS ENROLLED IN THE MDP	131
6.2	2.1 What is the Effect of Gender on Factors Influencing Participation and rformance of Officers Enrolled in the MDP?	
	2.2 What is the Effect of Age on Factors Influencing Participation and rformance of Officers Enrolled in the MDP?	.132
	2.3 What is the Effect of Dependent Children on Factors Influencing rticipation and Performance of Officers Enrolled in the MDP?	.134
	2.4 What is the Effect of Current Rank on Factors Influencing Participation and rformance of Officers Enrolled in the MDP?	.135
	2.5 What is the Effect of Type of Duty Performed on Factors Influencing rticipation and Performance of Officers Enrolled in the MDP?	.137
	2.6 What is the Effect of Highest Educational Level Attained on Factors duencing Participation and Performance of Officers Enrolled in the MDP?	.138
	2.7 What is the Effect of Geographic Remoteness on Factors Influencing rticipation and Performance of Officers Enrolled in the MDP?	.140
REP VAR	AN A MODEL THAT PROVIDES A COMPREHENSIVE RESENTATION OF THE RELATIONSHIPS AMONG THE IABLES BE DEVELOPED?	.142

CHAPTER 7 RESULTS OF PHASE 3 OF STUDY	151
7.1 INTRODUCTION	
7.2 RESULTS OF TWO SEMI-STRUCTURED INTERVIEWS	
7.2.1 In-service Professional Development	
7.2.2 Policing as a Profession	
7.2.3 MDP Success Potential	
7.2.4 Student Support	
7.2.5 Clinical Program Delivery	
7.2.6 Officer-Staff Member Discourse	161
7.2.7 Emotional Support	162
7.3 CONCLUSION	163
CHAPTER 8 DISCUSSION OF RESULTS	165
8.1 INTRODUCTION	165
8.2 RESEARCH QUESTIONS IN RELATION TO PHASE 1	
8.2.1 Factors Encouraging Officer Participation in the MDP	
8.2.2 Factors Discouraging Officer Participation in the MDP	
8.2.3 Factors that Might Affect an Officer's Performance in the MDP	171
8.2.4 Factors that Might Influence an Officer's Termination of Enrolment in the MDP	172
8.2.5 Factors in Relation to the Provision of Student Support for Officers Enrolled in the MDP	174
8.3 IDENTIFICATION OF SEVEN AREAS THAT FORMED THE BASIS	
FOR SCALE DEVELOPMENT 8.3.1 In-service Professional Development	
8.3.2 Policing as a Profession	
8.3.3 MDP Success Potential	
8.3.4 Student Support	
8.3.5 Clinical Program Delivery	
8.3.6 Officer-Staff Member Discourse	
8.3.7 Emotional Support	
8.4 RESEARCH QUESTIONS IN RELATION TO PHASE 2 8.4.1 What is the effect of gender on factors influencing participation and	
performance of officers enrolled in the MDP?	184
8.4.2 What is the effect of age on factors influencing participation and performance of officers enrolled in the MDP?	185

	8.4.3 What is the effect of dependent children on factors influencing participation and performance of officers enrolled in the MDP?	
	8.4.4 What is the effect of current rank on factors influencing participation and performance of officers enrolled in the MDP?	187
	8.4.5 What is the effect of type of duty performed on factors influencing participation and performance of officers enrolled in the MDP?	188
	8.4.6 What is the effect of educational level attained on factors influencing participation and performance of officers enrolled in the MDP?	189
	8.4.7 What is the effect of geographic location on factors influencing participation and performance of officers enrolled in the MDP?	190
	8.4.8 Discussion of a model that provides a comprehensive representation of the relationships among the variables	190
8	8.5 RESEARCH QUESTION IN RELATION TO PHASE 3	193
	8.5.1 In-service Professional Development	
	8.5.2 Policing as a Profession	196
	8.5.3 MDP Success Potential	198
	8.5.4 Student Support	199
	8.5.5 Clinical Program Delivery	200
	8.5.6 Officer-Staff Member Discourse	201
	8.5.7 Emotional Support	202
8	3.6 CONCLUSION	
CI	HAPTER 9 CONCLUSION: SUMMARY, IMPLICATIONS, ECOMMENDATIONS AND LIMITATIONS	
9	9.1 INTRODUCTION	204
	9.2 SUMMARY OF THE STUDY	204
9	9.3 IMPLICATIONS OF THE STUDY	
	9.3.2 Implications for Members of the Senior Executive of the Queensland Police	
,	Service in Relation to the Delivery of the MDP	
9	9.4 SUMMARY OF RECOMMENDATIONS 9.4.1 Recommendations for the MDP	
	9.4.2 Recommendations for Members of the Senior Executive of the QPS in Relation to the Delivery of the MDP	218
	9.5 LIMITATIONS OF THE STUDY	
	9.6 AREAS FOR FURTHER RESEARCH	
9	9.7 CONCLUDING REMARKS	222

REFERENCES	226
APPENDIX A	254
APPENDIX B	255
APPENDIX C	278
APPENDIX D	282
APPENDIX E	286
APPENDIX F	288
APPENDIX G	301
APPENDIX H	303

LIST OF APPENDICES

		PAGE
Appendix A	Interview Schedule - Phase 1	254
Appendix B	Six Semi-structured Interview Transcripts – Phase 1	255
Appendix C	Questionnaire (Pilot Study)	278
Appendix D	Questionnaire (Main Study)	282
Appendix E	Interview Schedule – Phase 3	286
Appendix F	Two Semi-structured Interview Transcripts – Phase 3	288
Appendix G	Information Letter To Participants	301
Appendix H	Ethics Approval	303

LIST OF TABLES

		PAGE
4.1	Descriptive Information for Five Scales Influencing Participation	
	and Performance of Police Officers in the MDP (Pilot Study)	90
4.2	Validation Data for Five Scales Influencing Participation and	
	Performance of Police Officers in the MDP (Pilot Study)	91
4.3	Refinement Decisions for In-Service Professional Development	
	(IPD) Scale	92
4.4	Refinement Decisions for Policing as a Profession (PP) Scale	93
4.5	Refinement Decisions for MDP Success Potential (MSP) Scale	94
4.6	Refinement Decisions for Student Support (SS) Scale	94
4.7	Refinement Decisions for Clinical Program Delivery (CPD) Scale	95
4.8	Two Additional Scales Adapted from The Metacognitive	
	Orientation Learning Environment Scale - Science (MOLES-S)	97
4.9	Descriptive Information for the Final Form of the Questionnaire	
	Assessing Participation and Performance of Police Officers in the	
	MDP (Main Study)	98
4.10	Validation Data for Seven Scales Influencing Participation and	
	Performance of Police Officers in the MDP (Main Study)	99
6.1	Sub-Questions for Research Question Three	130
6.2	Path Coefficients and Error Variances for Seven MDP Evaluation	
	Scales	143
6.3	Summary of Specifications and Fit Statistics for Tested Models	
	MDP Success Potential	146

LIST OF FIGURES

		PAGE
3.1	Overall Design of the Study	58
3.2	Measurement Model for Student Support	73
5.1	Steps in Phase 1	107
6.1	Mean Scores for Seven Participation and Performance Scales	
	According to Gender (N = 475 officers)	132
6.2	Mean Scores for Seven Participation and Performance Scales	
	According to Age (N = 475 officers)	133
6.3	Mean Scores for Seven Participation and Performance Scales	
	According to Dependent Children (N = 475 officers)	
6.4	Mean Scores for Seven Participation and Performance Scales	
	According to Rank (N = 475 officers)	136
6.5	Mean Scores for Seven Participation and Performance Scales	
	According to Duty (N = 475 officers)	138
6.6	Mean Scores for Seven Participation and Performance Scales	
	According to Highest Qualification (N = 475 officers)	140
6.7	Mean Scores for Seven Participation and Performance Scales	
	According to Geographic Remoteness (N = 475 officers)	141
6.8	Postulated Model for MDP Success Potential	144
6.9	Final Model for MDP Success Potential	147
7.1	Steps in Qualitative Data Analysis	152

CHAPTER 1

AN OVERVIEW OF THE STUDY

1.1 INTRODUCTION TO THE STUDY

This thesis reports research that investigates the Management Development Program (MDP) offered by the Queensland Police Service (QPS) to officers at the rank of senior constable, sergeant and senior sergeant. The focus of this study was the factors that affected the participation and performance of officers who enrolled in this distance education program.

This chapter provides the background to the introduction of the MDP that resulted from a world-wide movement to professionalise police services. Information about this movement within the Australian context is provided. Within the Queensland context, the MDP resulted directly from a Commission of Inquiry into Possible Illegal Activities and Associated Police Misconduct (Commissioner Fitzgerald QC) (1989) *Report of a Commission of Inquiry Pursuant to Orders in Council (The Fitzgerald Report)*, Public Sector Management Commission (PSMC) and Criminal Justice Commission (CJC) reports. Both the PSMC and CJC are statutory authorities of the Queensland Government. A significant finding of the Fitzgerald Inquiry was the need for management education for police officers and the MDP was developed as a result of this finding.

1.1.1 Management Education for Police

As Hudzik (1978) notes, the movement to professionalise the police services world-wide was initiated by Vollmer who proposed a 36-month college-level program for police education in 1917. Sherman (1978) states that according to the United Kingdom National Advisory Commission on Higher Education for Police Officers, the goal of police reform movements since the 1940s has been to professionalise police services. A number of

authors including Bennet and Hikenstad (1973), Dale (1994), Geller (1985), Greenhill (1981), Johnson (1972), and Reader (1966) have identified several characteristics of a profession. Some of these characteristics are: standard qualifications, conditions of entry to the profession, standard methods of training, codes of ethics, behaviour and self-regulation, and the possession of a body of knowledge.

A survey of Australian police operations conducted by Rawson (1986) highlighted the need for police to be prepared to perform at a professional level. Included in such preparation was the need for management training. Police Commissioners from all states in Australia adopted Rawson's recommendations as part of a national strategic initiative intended to assist the services to achieve full professional status.

In November 1988, the Australian Police Ministers' Council (APMC) (Winzler, 2004) agreed on the need to address national police education requirements and survey research was conducted in 1990. All Commissioners of Police in Australia supported the results of the national survey and the National Police Professionalism Implementation Advisory Committee was formed (National Police Professionalism Implementation Advisory Committee, 1990).

According to Winzler (2004), two initiatives resulted from the recommendations of the National Police Professionalism Implementation Advisory Committee (1990). The first was the establishment of the Australian Graduate School of Police Management that was established as an agreement between Charles Sturt University and the Commonwealth Government in 1992, and the second was the establishment of the Police Agencies National Competency Standards Project (Rohl & Barnsley, 1995).

These developments within the Australian policing context were significant because subsequent developments in Queensland were directly linked to the work of the National Police Professionalism Implementation Advisory Committee. The introduction of the MDP by the QPS was designed to contribute to the wider reform of policing from vocational to professional status.

1.1.2 Context for the Study: The Queensland Police Service

The MDP is provided by the Human Resource Development Branch of the QPS from the QPS Academy at Oxley, a suburb of Brisbane, and is seen as a mechanism for enhancing the supervisory and management skills of serving police officers. The provision of management education by the QPS is part of a world-wide trend that acknowledges the importance of education for officers at all levels and at all stages of their careers within the service. Significant physical, financial and human resources are committed to the provision of management education for officers at the rank of senior constable, sergeant and senior sergeant by the QPS.

An appreciation of the context of the present study is necessary for the research reported in this thesis to be understood. Information relating to the current policies for management education for police is provided and draws on reviews and commissions of inquiry including *The Fitzgerald Inquiry*, PSMC and CJC reports. The *Fitzgerald Inquiry* in Queensland resulted from evidence relating to corrupt behaviour by police officers and was disclosed by Dickie (1987).

In the report that resulted from *The Fitzgerald Inquiry*, Fitzgerald (1989) stated that officers of the police service should have an understanding of the social, psychological and legal issues underlying policing and society and that this could be achieved through higher education. *The Fitzgerald Report* (p. 250) also found there was "no effective training development program in place for potential or current police supervisors and managers in charge of general operational work." Fitzgerald was critical also of the Sergeants' and Commissioned Officers' qualifying programs and stressed the need for training to be provided in management and not just legal areas. To address this issue, Fitzgerald recommended greater access to tertiary-level training in management and increased emphasis on provision of skills training for those in managerial roles.

As a result of the *Fitzgerald Inquiry* (see Bradley, 1994), a Police Education Advisory Council (PEAC) was created by the CJC in 1990 and this council advocated educational

reforms within the service. Members of PEAC include the Commissioner of Police who is the Director-General of the QPS. The aim of PEAC is to ensure that external expertise is utilised in police education with membership drawn from academics, union representatives and senior members of the QPS. The role of PEAC is to advise the Commissioner on education and training policy. The present Criminal Misconduct Commission (CMC) (formerly the CJC) also plays a role in the overview of police education.

The CJC report (1993, p. 49) *Recruitment and Education in the QPS* found that "only limited provision has been made for managerial and supervisory training in the QPS." A subsequent report, CJC (1994) entitled *Implementation of Reform within the QPS: The response of the QPS to the Fitzgerald Inquiry Recommendations* noted that, following the Public Sector Management Commission's Review of the QPS (1993), the Human Resource area had been reorganized and a more strategic approach had been taken to Human Resource policies and practices. The CJC report (1994) subsequently emphasised the need for training for supervisory and managerial staff of the QPS.

As outlined in the QPS Review (1996), a Human Resource Development Plan was developed for the QPS in 1995. Serving officers complete initial training that includes a First Year Constable Program. This is followed by a Constable Development Program as part of the continuum of development plans for serving officers. The focus of the research reported in this thesis, the MDP is designed to follow the Constable Development Program. A Commissioner's Circular 3/1999 (Appendix D, Section 16.2 Human Resource Manual) stated that the successful completion of the respective levels of the MDP was a prerequisite for promotion to sergeant, senior sergeant and inspector as from 1 January 1999.

The QPS, as with other public sector organizations generally, has relied on management education for its managers to assist it to achieve its goals. To operate in a genuinely strategic way, managers at all levels are required to make decisions in accordance with clearly stated values and objectives. Pragmatic decisions, particularly with an operational focus have to be made in conjunction with the strategic focus of the organization. An

implication for the QPS in relation to career progression is that in the past, operational achievements by individual officers had been the foundation for promotion to more senior ranks. Merit-based promotion was seen as a fairer and more equitable system, and this system was subsequently introduced. Promotion by merit highlighted the need for officers to be able to manage competently at the rank to which they were promoted. It also highlighted the need for the QPS to provide in-service education so that, once promoted, officers could perform competently in both strategic and operational contexts (Commissioner's Circular 24/1991, Appendix D, Section 16.2, Human Resource Manual).

As with other public sector agencies, the QPS moved to a system of *Managing for Outcomes* (Queensland Treasury, 1997), and this meant a greater focus on accountability for promoting quality, maximising value for money in service delivery and improving resource allocation decision-making. A change in emphasis from inputs to outcomes is inherent in the philosophy of Managing for Outcomes. By adopting Managing for Outcomes, the Queensland Government aimed to improve the management of the Government's resources and increase the quality and efficiency of its service delivery to the Queensland community. Managers of the QPS are required to comply with the Queensland Government's policies for managing for outcomes and in-service management education is designed to assist managers to acquire the necessary skills.

Together with most organizations, the QPS seeks to manage its business and deliver services in the most efficient and effective ways. To perform at optimal levels, it has been found that organizations must become learning systems in which the entire organization embraces the learning mode. Furthermore as Senge (1990) notes an organization must create a future by expanding its capacity. Commitment to the provision of management education was one strategy whereby the QPS, as an organization, could achieve the goal of being a learning organization. The *Report of the Review of the QPS* (CJC, 1996) noted the MDP was developed as a response to the above reports and issues that impacted on the service generally. Approval for the MDP was given by the QPS Board of Management.

1.1.3 The Management Development Program

The MDP is seen as a mechanism for improving the supervisory and management skills of serving police officers. It is offered by distance education and consists of three distinct, but inter-related levels (QPS Publication, 2000). The MDP is designed to meet the specific needs of the service and is offered at postgraduate level in accordance with such study at Australian tertiary institutions. The QPS believes that managerial qualities can be improved through education thus resulting in an increase in organizational efficiency and an improvement in internal operations (QPS Publication). This belief was supported by Bittner (1990) who reinforced the role of higher education as liberating the mind and encouraging the use of powers of reasoning in order that employees function adequately in a world where knowledge and intelligence are important.

Units offered within the MDP provide the management knowledge, understanding and skills necessary to support police officers in their transition to the ranks of sergeant, senior sergeant and commissioned officer levels within the service. Because officers who undertake the program are located throughout Queensland, the program is offered by distance education mode. The program operates on a two-semester per year basis, and each unit is offered each semester. In 1996 the first units were offered, and by second semester 1997 all seven units were in operation.

Facilitators attached to the MDP consist of civilians with postgraduate qualifications and police officers who apply for and win positions on merit to facilitate within the program. The terms *staff member* or *facilitator* have been used when discussing those employed within the MDP. The manager of the program is a police officer at inspector level and is supported by a principal staff development officer who has responsibility for the academic conduct of the program. A School of Management was established and a head of school is responsible for the operational aspects of the school. This balance of police officers and civilian facilitators provides a strong professional and academic support base for officers undertaking the program. The specialist policing knowledge that experienced police

officers bring to the program complements the expertise of civilians, who have qualifications in management.

Level 1 of the MDP aims to provide professional development in management for officers at the rank of senior constable (and those constables qualified for progression to senior constable) in relation to the responsibilities associated with the rank of sergeant. Level 2 aims to provide professional development in management for officers at the rank of sergeant in relation to the responsibilities associated with the rank of senior sergeant. Level 3 seeks to provide professional development in management for officers at the rank of senior sergeant in relation to the responsibilities associated with the rank of commissioned officer. A program that provides an introduction to tertiary-level study also exists and is designed to assist police officers with the development of management skills and knowledge required by supervisors and middle managers. The unit also acts as a bridging unit to provide officers with an introduction to study at a postgraduate level.

There are two main streams in the MDP: Management Studies in Policing, and Legal Studies in Policing. Each stream is offered at Levels 1, 2 and 3. Because of the importance attributed to officers gaining sound management skills, the focus for this study is the Management Studies in Policing stream.

1.2 THE RESEARCH PROBLEM AND RESEARCH QUESTIONS

1.2.1 Research Problem

This study investigated the factors that affected participation and performance of officers of the QPS who undertook the MDP by distance education. Participation refers to officers who enrolled in the program and successfully completed at least one unit, and was of interest because successful completion of respective levels of the program was mandatory for officers who sought promotion to the next rank. Factors that affected performance were crucial to this study because high numbers of officers have experienced difficulty with

study at postgraduate level. A further performance issue related to the numbers of officers who terminated their enrolment in the study.

1.2.2 Research Questions

Based on the research problem, five research questions were identified.

- 1. What are the key factors that influence participation and performance by officers of the QPS undertaking the MDP by distance education?
- 2. Can valid scales to assess the factors that influence participation and performance by officers undertaking the MDP be developed?
- 3. What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP?
- 4. Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?
- 5. What are the implications of the study for enhancing the delivery of the MDP?

1.3 RATIONALE FOR THE STUDY

Notwithstanding the outcomes of the Fitzgerald Inquiry (1989), continuous professional development of police officers has been an important challenge for the QPS. An analysis of unit completion rates within the MDP revealed that 30% of officers who enrolled in the program failed to achieve a passing grade (MDP, 1999). This high dropout and failure rate impacts on the individual officer because such officers are not eligible to apply for promotion. As noted previously, successful completion of the MDP is mandatory for those officers who seek promotion to the next rank. The program is offered at nil cost to officers and it is crucial that positive outcomes are achieved for the resources allocated.

In 2000, the MDP had been operating for four years and concerns had been raised about the relevance of its content and the industrial issues relating to the fact that the program was compulsory for those officers who sought promotion (MDP, 1999). Many officers had not accommodated to the requirement to complete the program and there were significant numbers of officers who enrolled in the program and subsequently cancelled their enrolment or failed to achieve satisfactorily. Significant concerns were also expressed about the suitability of delivery in a distance education mode (MDP).

Because of these issues, there was a need to conduct research related to the factors that affected the participation and performance of officers of the service who engaged in the MDP. Outcomes of the research would lead to recommendations for the enhanced delivery of the program and ultimately to more effective teaching and learning for officers and enhanced organizational benefits for the QPS.

1.4 SIGNIFICANCE OF THE STUDY

For strategic human resource management to be effective, benefits should accrue to the individual and to the organization. The QPS Strategic Plan in 1999 stated that training and development must be offered to staff and the MDP was one way the QPS sought to address this requirement of the Strategic Plan. This study is significant for the QPS because it makes recommendations about program delivery strategies that will enhance the learning of officers who undertake the program, and thus ensure that the returns on the investment in this educational program are significant and contribute to the achievement of strategic goals.

1.5 RESEARCH DESIGN AND STRUCTURE OF THE STUDY

This section introduces the research design and structure of the study by reporting its methodological principles, overall design, and qualitative and quantitative data collection methods employed in this study. Full details of these methodological issues are provided in Chapter 3 of this thesis.

1.5.1 Methodological Principles

Philosophical assumptions that support this study were drawn from both phenomenology (the qualitative components) and positivism (the quantitative components) (Ary, Jacobs, & Razavich, 2000). A phenomenological approach was employed because the researcher had to attempt to record and understand the meanings of the six facilitators of the MDP who provided data for Phase 1 of the study, and the manager and the head of the School of Management who provided data for the third phase. It was necessary for the researcher to focus on the social reality of each research participant. Positivists emphasise measurement and collecting data through objective techniques and it was appropriate to draw on this philosophical base for this study because the use of a questionnaire to collect data from a representative sample of officers was the most efficient way to proceed. By employing qualitative and quantitative research techniques from both phenomenology and positivism it was hoped that accurate answers to the Research Questions could be provided. These philosophical approaches provided the basis for the research design for this study.

1.5.2 Overall Design of the Study

The research design for this study provided the basis for determining the sources and type of information that could be used to answer the research questions. This study was exploratory in nature and involved both qualitative and quantitative data collection methods.

There were three phases of data collection for this study. Phase 1 employed semi-structured interviews that were conducted with six facilitators attached to the MDP. This initial work resulted from a need for the researcher to become familiar with the perceptions of facilitators about their experiences with officers enrolled in the program. Data were collected on issues related to participation and performance of officers, the nature of learning in the distance education mode, factors inherent in the clinical delivery of the program, the impact the role of policing had on individual officers, and the nature of student support that was required for officers to be successful in the MDP. This approach

was chosen for this phase of the study because it ensured a face-to-face encounter with the six research participants. The purpose of this phase of data collection was to gain the perceptions of the six facilitators who were directly involved in the delivery of the MDP and had direct contact with the officers who studied with the program.

Data collected from the first phase were used as a basis for the second phase of the study: the development of a questionnaire that assessed the perceptions of officers who had successfully completed at least one unit of the MDP. A questionnaire was chosen for this quantitative research because it was seen as the most appropriate method to collect data required from officers who had completed at least one unit of the MDP. The objective of this second phase of data collection was to assess officers' perceptions of the MDP. Officers were asked to respond to a questionnaire that assessed the factors that affected their participation and performance when engaged in the program. A third phase of the research program was based on the outcomes of Phases 1 and 2, and involved semi-structured interviews conducted with the manager of the program and the head of the School of Management. The purpose of the third phase was to gain the perception of these two senior managers of the program for enhancing the delivery of the MDP. The interview schedule was based on an analysis of the data from the questionnaire used in Phase 2.

Because of the uniqueness of this study, the interview schedules for Phases 1 and 3 and the questionnaire used for Phase 2 were developed specifically to answer the research questions posed. Both qualitative and quantitative techniques were employed because each technique was deemed most appropriate for the specific nature of the data sought in each of the three respective phases.

1.6 THE RESEARCH SETTING

The MDP offered by the QPS through the distance education mode to officers at the rank of senior constable, sergeant and senior sergeant provided the basis for this research. The program is offered from the QPS Academy at Oxley (in Brisbane), Queensland. Facilitators of the MDP, the manager and the head of the School of Management

contributed to Phases 1 and 3 of this study. These QPS personnel are all located at the QPS Academy. Officers who completed the questionnaire as part of Phase 2 of the data collection process were located throughout Queensland.

1.7 THE STRUCTURE OF THIS THESIS

Including this introductory chapter, this thesis has nine chapters. Chapter 2 reviews relevant literature for the study. As stated previously, the MDP is offered by distance education mode. Learning materials are provided in hard-copy format because officers enrolled in the program are located throughout Queensland and face-to-face delivery of learning experiences cannot be provided. As a consequence, the literature reviewed for this study relates to the theory that underpins the practice of distance education. The second field of literature reviewed is the study of learning environments for the adult learner.

Chapter 3 describes the methodology adopted for this study. To answer the five research questions, as outlined in Section 1.2.2, both qualitative and quantitative research techniques were used. A justification for the specific research methods employed is provided as well as a justification for combining qualitative and quantitative data collection methods. The research design section details procedural issues of the study for data collection methods, data analysis and the research period. The third section discusses validity issues relating to the qualitative and quantitative components of the study.

Chapter 4 discusses the development of the interview schedules and development and validation of the questionnaire used in this study. A theoretical perspective has been provided on the development of interview schedules and questionnaires. Specific sections relate to the development of the semi-structured interview schedule used in Phases 1 and 3, and the development and validation of the questionnaire used in Phase 2.

Chapter 5 reports the analysis of qualitative data collected during Phase 1 of the data collection process. Details are provided about the process for analysing the data which included organizing data from the six semi-structured interviews, generation of areas from

the data, and an analysis of the areas that subsequently provided the basis for the scales that were developed for Phase 2 of the data collection process for this study. The rationale for including two additional scales from The Metacognitive Orientation Learning Environment – Science (MOLES – S) (Thomas, 2002) is provided.

The results of the quantitative analyses are reported in Chapter 6. This chapter reports the use of the questionnaire that was developed from the data collected during Phase 1 of this study. Information about the data, as they relate to each of the seven scales that formed the basis for the questionnaire used in Phase 2 is provided. Research Question 3 with its associated sub-questions has been answered in this chapter. Demographic data of the officers who responded to the questionnaire have been provided. Details about the analysis of data and factors that affected participation and performance of officers enrolled in the MDP have been provided in relation to the independent variables. The final section relates to Research Question 4 and provides a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP. Details relating to the two-stage process employing Principal Components Factor Analysis (PCFA) and Structural Equation Modelling (SEM) are provided.

Chapter 7 provides the results of the third phase of data collection where a qualitative approach was again used. The process for organising data from the two semi-structured interviews is described.

Chapter 8 discusses the results of the research findings for the three phases of data collection as reported in Chapters 5, 6 and 7. The research questions (see Section 1.2.2) are discussed with regard to literature relating to educational programs offered in the distance education mode.

Chapter 9 concludes the thesis by summarising the study and suggesting recommendations for the delivery of the MDP for administrators and for members of the senior executive of

the QPS. The limitations of the study are considered and suggestions for further research are provided.

1.8 CONCLUSION

In this chapter a context for the study has been provided to enable the research to be understood. Inherent in this context is *The Fitzgerald Inquiry* conducted in 1989 and the subsequent reports of the CJC that had responsibility for overseeing the educational recommendations from *The Fitzgerald Inquiry*. Background information detailing the units, levels and entry requirements of the MDP has been provided, as has information about facilitators and administrators of the program.

The research problem and research questions, as well as the rationale for the study, have been provided and justification for this study of the factors that affected participation and performance of officers who undertook the MDP is given. Significance of the study focuses on the achievement of the goals of the QPS Strategic Plan as they relate to the provision of continuing professional development.

An outline of the research design of the study including methodological principles, overall design and the research setting have been provided. In addition, an outline of the structure of the thesis with information contained in each chapter is provided in this introduction. This chapter has presented the case for studying the factors that affected participation and performance of police officers who undertook a management development program by distance education within the QPS.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter provides a contextual review of empirical and theoretical literature relevant to the experiences of adults undertaking a program of study in the distance education mode. Literature applicable to this enquiry was drawn from two major fields of social science research. The first field of literature is distance education, with particular attention given to the theory that underpins the practice of distance education (see Section 2.2). The MDP offered by the QPS, on which this thesis is based, was delivered in the distance education mode to officers geographically located throughout Queensland. The second field of literature pertains to the study of learning environments with an emphasis on the distance education context for adult learners (see Section 2.3). Section 2.4 provides a conclusion to the chapter.

This review defines and describes the field of distance education, discriminates between its various components, and identifies the critical elements of the various forms of teaching and learning in the distance education mode. Theory in distance education is heavily descriptive with understandings and explanations derived from practice. Much of the theory relating to distance education has been grounded in the context in which researchers operate. A review of this literature serves as a background for the MDP that was delivered by distance education mode.

2.2 DISTANCE EDUCATION

2.2.1 Introduction

Distance education has evolved as a distinct field within the broader discipline of education with links to related fields such as adult education, educational technology and the study of non-traditional systems such as flexible delivery. The study of distance education is

relatively new and the theoretical background that underpins much of contemporary practice is based on the work of Holmberg in the 1950s. It was not until the 1970s that the study of distance education was taken seriously and funding was allocated to strengthen the theoretical structure of distance education (Keegan, 1990).

Distance education resulted from a paradigm shift from the classic model within higher education where learning experiences were provided for a number of students grouped in one location who learned under the andragogical supervision of a qualified person (Keegan, 1990). The relationship between distance education and other forms of direct education was examined by Keegan (1990), particularly in relation to contributions to the field by Peters (1992). Peters believed that in contrast to traditional face-to-face education, indirect education was characterised by such features as education by letter, printed material, teaching kits, audio-visual aids, radio and television, programmed learning, computer-aided learning, independent study and private study. This had direct relevance to the present study because materials were provided to officers in hard copy only. Use of electronic media was not included as a medium of delivery because not all officers throughout Queensland had access to such facilities. By providing learning materials in hard copy format, all officers had access to the same materials at virtually the same time and issues of equity in the provision of learning materials did not arise. Consequently, issues of e-learning within distance education have not been included in this literature review.

Keegan (1990) viewed distance education as a combination of distance teaching and distance learning and noted that distance education was also referred to as open, non-traditional education with the following terms gaining acceptance: correspondence study, home study, external studies, independent study, teaching at a distance, off-campus study and open learning. Within the Australian context, the term *external* studies has gained acceptance (Keegan).

Distance education provided a challenge to the traditional face-to-face mode of delivery because the learning experiences for students studying in the distance education mode had to be of similar quality. Models of distance education that have been developed to embrace

non-traditional methods of teaching and learning have been considered in relation to the delivery of management education for the QPS.

2.2.2 Definition of Distance Education

Keegan (1990) believed *distance education* was the most commonly accepted term internationally and that common characteristics included the separation of teacher and learner and this distinguished it from conventional, face-to-face and group-based education. Further, Keegan believed the term distance education also acknowledged the two characteristic operating systems that were unique to distance education which were the course development subsystem (distance teaching) and a student support subsystem (distance learning).

Keegan (1990, p. 35) favoured the use of a programmatic definition as it "seeks to include additional items within a term or to exclude from a term elements which people had previously thought were included." Elements of the programmatic definition that have had a place in definitions of distance education include the notion that has been commonly adopted that programs were flexible and incorporated the use of modern communication technology (Keegan). This was relevant for the MDP because of the use of the QPS intranet and email communication with officers that was inherent in the delivery of the program.

Keegan (1990, p.44) drew on the work of significant contributors to the field of distance education, for example Dohmen (1976), Peters (1973), Moore (1973), and Holmberg (1977), and proposed that distance education was a form of education characterized by:

- the quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face-to-face education);
- the influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programmes);

- the provision of two-way communication so that the student may benefit from or even initiate dialogue (this distinguishes it from other uses of technology in education); and
- the quasi-permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meetings for both didactic and socialisation purposes.

Rowntree's (1992, p. 29) definition of distance education supported Keegan "...learning while at a distance from one's teacher - usually with the help of pre-recorded, packaged learning materials." While teachers and learners were separated in a geographic sense, teachers still provided guidance and support. Within the MDP sponsored by the QPS, officers were geographically located throughout all regions of Queensland. While officers undertook the entire program by distance education mode, a three-week residential program complemented the delivery for a third-level unit of management education.

Delivery in the distance education mode was the most efficient mode of delivery of the MDP because all officers who sought to enrol in the program had equal access to learning materials and facilitator support. The MDP provided a vehicle for the QPS to offer management education to officers at the ranks of senior constable, sergeant and senior sergeant.

2.2.3 Theoretical Perspectives of Distance Education

This subsection introduces and discusses four categories of theories which had relevance to the delivery of the MDP:

- Theories of Independence and Autonomy
- Theory of Industrialisation
- Theories of Interaction and Communication
- Equivalency Theory

Simonson, Schlosser and Hanson (1999, p. 60) stated that theory in the context of distance education "is taken to mean a set of hypotheses logically related to one another for explaining and predicting occurrences." Theories of distance education have been classified by Keegan (1990) into three groups: theories of independence and autonomy; theories of industrialisation of teaching; and theories of interaction and communication. Simonson et al. (1999, p.61) proposed a fourth category, Equivalency Theory, which "seeks to explain distance education through a synthesis of existing theories of communication and diffusion as well as philosophies of education."

2.2.3.1 Theories of Independence and Autonomy

Three important theorists who have addressed the issues of independence and autonomy in distance education are Delling (1996), Wedemeyer (1974) and Moore (1990). Because independence and autonomy were critical issues for police officers undertaking study in the distance education mode, they were important theoretical constructs for the present study.

Delling (1996), who emphasised the notion of the educational institution in distance education as a helping organization, defined distance education as

a planned and systematic activity which comprises the choice, didactic preparation and presentation of teaching materials as well as the supervision and support of student learning and which is achieved by bridging the physical distance between student and teacher by means of at least one appropriate technical medium (Delling, 1996, p. 25).

Eight dimensions listed by Delling (1996) as central to distance education are

- a learner;
- society (including legislation, administration and family);
- a helping organization (distance education institution);
- a learning objective;
- the content to be learned;
- the result of learning;

- distance; and
- a signal-carrier.

Delling (1996) placed emphasis on the concepts of feedback and two-way communication, and noted a central difference between learning opportunities that were monologues such as newspapers, books and journals and those that were dialogic such as normal classroom teaching, conversations or distance education courses. To Delling, the important issue in distance education was that the institution was seen as a helping one and this aspect was of more significance than the role of the teacher. Emphasis in the distance education context was placed on the autonomy and independence of the learner.

This was particularly significant for this study, as many officers who enrolled in the MDP had limited previous experience with academic study and required considerable support to achieve learning outcomes successfully. Accordingly, many officers needed considerable assistance to achieve the status of autonomy and independence as learners, and this was a significant issue for facilitators and managers of the program.

Wedemeyer's (1974) contribution to distance education theory was based on a democratic social ideal and a liberal educational philosophy. These were demonstrated in his belief that a student should not be denied the right to an education because of geographic isolation, poverty, social disadvantage or otherwise be unable to attend an institution of learning. Officers who wanted to be eligible for promotion from the rank of senior constable to sergeant, from sergeant to senior sergeant or from senior sergeant to inspector were required to complete the respective levels of the MDP. Because the QPS had undertaken to provide such education, the program had to be delivered in a way that officers in every geographic region of Queensland could access. Wedemeyer supported Delling in the notion that a student should be encouraged to become an independent learner.

The independence of the learner was embraced by Wedemeyer (1973) within distance education at university level, and Wedemeyer provided the following definition

Independent learning is that learning that changed behaviour that results from activities carried on by learners in space and time, learners whose environment is different from that of the school, learners who may be guided by teachers but who are not dependent upon them, learners who accept degrees of freedom and responsibility in initiating and carrying out the activities that lead to learning (Wedemeyer, 1973, p. 73).

Wedemeyer (1968, p. 328) proposed a conceptual structure for distance education that included the following characteristics that emphasised learner independence:

- be capable of operating any place where there are students even only one student whether or not there are teachers at the same place, at the same time;
- place greater responsibility for learning on the student;
- free faculty members from custodial-type duties so that more time can be given to truly educational tasks;
- offer students and adults wider choices (more opportunities) in courses, formats, and methodologies;
- use, as appropriate, all the teaching media and methods proven effective;
- mix and combine media and methods so that each subject or unit within a subject is taught in the best way known;
- cause the redesign and development of courses to fit into an articulated media program;
- preserve and enhance opportunities for adaptation to individual differences;
- evaluate student achievement simply, not by raising barriers regarding the place, rate,
 method, or sequence of student study; and
- permit students to start, stop, and learn at their own pace.

Furthermore, Wedemeyer (1968) identified *space-time barriers* of education as a way to break the proposed separation of teaching and learning. Wedemeyer saw teaching and learning as separate activities and proposed six characteristics of independent study systems (1973, p. 76):

• the student and teacher are separated;

- the normal processes of teaching and learning are carried out in writing or through some other medium;
- teaching is individualised;
- learning takes place through the student's activity;
- learning is made more convenient for the student in the student's own environment; and
- the learner takes responsibility for the pace of learning, with freedom to start and stop at any time.

All characteristics as proposed by Wedemeyer related to the delivery of the MDP except for the learner having the freedom to start and stop at any time. Because of the numbers of officers enrolled, units were offered on a semester basis. Officers were free to withdraw from study in any semester and permitted to enrol in subsequent semesters without incurring penalty. This policy was implemented to accommodate the nature of an operational police officer's employment where the nature of policing duties could have considerable impact on an officer's ability to continue with study in a given semester.

Wedemeyer (1968, p. 48) also believed that every teaching-learning situation is comprised of four elements:

- a teacher;
- a learner or learners;
- a communications system or mode; and
- something to be taught/learned.

Physical space was added to the above elements to accommodate the belief that distance education should allow for teaching and learning to happen at any place, at any time and for one learner or many learners. This would result in greater freedom for the learner.

Moore was from the same family of theorists as Delling and Wedemeyer, and his contribution to a theory of distance education was based on his belief that distance education was "a family of transactions between teachers and learners" (1973, p. 664). Within these transactions were the dimensions of dialogue and structure and learner

autonomy. There were three subsystems in Moore's model: a learner, a teacher and a method of communication and these three subsystems had characteristics that distinguished them from learning, teaching and communication in other forms of education. Moore saw teaching activities as either face-to-face or *continuous* teaching or *distance teaching*. Within Moore's (1990) theoretical structure, two groupings of educational offerings as essential components of independent study were identified. These were programs designed for learners in environments apart from their instructors (distance teaching) and programs designed for the encouragement of independent/self-directed learning (learner autonomy). Through these groupings the traditions of distance teaching and self-directed study were brought together.

From the contributions of these three theorists, several salient points for this thesis can be identified. The first related to the nature of the organization that sponsored the learning and the importance of the QPS's being a helping organization. A second was to maximise learning for the officers enrolled, appropriate physical and human resources must be provided and the third was that the prevailing philosophy must be one of officer support. In addition, all three theorists stressed the importance of acknowledging the subsystems of learner, teacher and method of communication and the importance of the teacher and method of communication assisting the learner to become responsible for his or her learning and becoming independent and autonomous learners.

2.3.3.2 Theory of Industrialisation

While independence and autonomy are important features in a program of distance education such as the MDP, Peters' (1973) theory of industrialisation also provided a significant contribution to an understanding of delivery of education in the distance education mode. In his search for a theory of distance education, in the early 1960s Peters focussed on an analysis of European distance teaching organizations. Peters proposed that the industrial production process provided a satisfactory basis for an analysis of distance teaching. The focus for Peters' theory was the functions of the institutions developing learning materials. Peters (1988, p. 95) stated that "from many points of view,

conventional, oral, group-based education was a pre-industrial form of education", and he implied that distance teaching could not have existed before the industrial era. The following new categories (terminology) to analyse distance education were provided by Peters based on economic and industrial theory:

- Rationalisation: the use of methodical measures to reduce the required amount of input of power, time and money;
- Division of labour: the division of a task into simpler components or subtasks,
- Mechanization: the use of machines in a work process. (Peters noted that distance education would be impossible without machines);
- Assembly line: a method of work in which workers remain stationary while objects they
 are working on move past them. In traditional distance education programs, materials
 for both teacher and student are not the product of one individual;
- Mass production: the production of goods in large quantities. Because demand outstrips supply at colleges and universities, there has been a trend toward large-scale operations;
- Preparatory work: determining how workers, machines, and materials can usefully relate to each other during each phase of the production process. The success of distance education depends on a preparatory phase;
- Planning: the system of decisions that determines an operation prior to its being carried out;
- Organization: creating general or permanent arrangements for purpose-oriented activity,
 Organization makes it possible for students to receive predetermined instructional units at appointed times;
- Scientific control methods: methods by which work processes are analysed systematically, particularly by time studies, and in accordance with the results obtained from measurements and empirical data;
- Formalization: the predetermination of the phase of the manufacturing process. In distance education, all the points in the cycle must be determined exactly;
- Standardization: the limitations of manufacture to a restricted number of types of one
 product to make these more suitable for their purpose, cheaper to produce, and easier to
 replace;

- Change of function: the change of the role or job of the worker in the production process. The original role of knowledge provider as lecturer is divided into those of study unit, author and marker;
- Objectification: the loss, in the production process, of the subjective element that had previously determined work to a considerable degree. In distance education most teaching functions are objectified; and
- Concentration and centralization: because of the large amount of capital required for
 mass production, there has been a movement toward large industrial concerns with a
 concentration of capital, a centralized administration, and a market that is monopolised.

Peters' use of economic and industrial theory to describe distance education has relevance for this thesis because the functions describe the process of producing and distributing learning materials to officers who undertook the program of study. Peters' theory of industrialisation has contributed to the understanding of education in the distance mode through his focus on the development of learning theories, and is complementary to the third category which has a focus on interaction and communication in the distance education process.

2.2.3.3 Theories of Interaction and Communication

Within distance education programs, learners must feel supported and there must be the potential for interaction between a student and a tutor. Interaction and communication must also be considered in the development of learning materials and in this category the contribution of Baath (1979) and Holmberg (1974) have been considered.

Baath's (1979) contribution was not directly a theory, but his theoretical and empirical contribution to the concept of two-way communication in correspondence education was significant. Baath examined teaching models proposed by Ausubel (1967), Bruner (1966) Egan (1975), Gagne (1962), Rogers (1969), Rothkopf (1957) and Skinner (1968) and concluded that

- models with stricter control of learning towards fixed goals tend to imply, in distance education, a greater emphasis on the teaching material than on the two-way communication between student and tutor/institution; and
- models with less control of learning towards fixed goals tend to make simultaneous communication between student and tutor/institution more desirable; this communication takes the form of either face-to-face or telephone contact.

The significance of Baath's (1979) contribution to contemporary practice in distance education was that it introduced the notion of two-way communication in the distance education process. For the delivery of the MDP the notion of exercises, questions or self-check tests was significant just as Baath noted about his personal involvement in distance education practice:

When writing correspondence course materials I was struck by the idea that it was possible to provide some kind of two-way communication within the material, by means of exercises, questions or self-check tests with detailed model or specimen answers. Could such two-way communication, to any considerable extent, replace the postal two-way communication induced by assignments for submission (Baath, 1979, p. 27)?

Baath (1979) identified two-way communication as central to the distance education process and equal importance was given to the role of the tutor within his concept. The tutor assumed importance with regard to providing support to the student at the beginning of his/her study and also by motivating the student. Part of the student's role, according to Baath was to link the learning materials to learning

by trying to relate the learning material to each student's previous reinforcement patterns (Skinner), or to his mathemagenic activities (Rothkopf), or to his previous knowledge and cognitive structure (Ausubel), or to his previous comprehension of the basic concepts and principles of the curriculum (Bruner), or by concentrating on the task of establishing a good personal relationship with the learner (Rogers) (Baath, 1979, p. 33).

To enhance communication between officer and facilitator within the MDP, police officers were employed as facilitators of the program. Their role complemented that of staff members who were employed because of their qualification and experience in the fields of management and education because the police officers inherently understood the role of an operational police officer and could provide considerable assistance based on that understanding.

Holmberg (1974) also stressed the importance of interaction and communication in the distance education process, and fundamental to Holmberg's theory of distance education was the belief that good practice must centre on the learning of the individual, with emphasis on such factors as the impact of feelings of belonging and cooperation as well as the actual exchange of questions, answers, and arguments in mediated conversation. The emphasis for Holmberg was on two-way conversation, and to Holmberg, distance education was seen as a guided didactic conversation. In 1999, he revisited the area of the communication process and reaffirmed his belief that if a course represented the communication process then a student would be more motivated and more successful than if the course had an impersonal textbook character. Holmberg (1999) based his idea on the belief that the conversational character could be derived from real communication with students and by a conversational style in printed and recorded subject-matter presentation. Holmberg's contribution was significant to the MDP because every attempt was made by curriculum designers and facilitators to relate to the needs of the officers who undertook the study and to communicate in a way that would engage the officers in learning.

Simonson et al. (1999) provided the following background assumptions to Holmberg's theory:

• The core of teaching consists of interaction between the teaching and learning parties. Simulated interaction through subject matter presentation in pre-produced courses can subsume part of the interaction by causing students to consider different views, approaches, and solutions and generally to interact with a course;

- Emotional involvement in the study and feelings of personal relations between the teaching and learning parties is likely to contribute to learning pleasure;
- Learning pleasure supports student motivation;
- Participation in decision-making is favourable to student motivation;
- Strong student motivation facilitates learning;
- A friendly, personal tone and easy access to the subject matter contributes to learning pleasure, supports student motivation, and thus, facilitates learning; and
- The effectiveness of teaching is demonstrated by students' learning of what has been taught.

Such background assumptions were encouraged in the educational philosophy of those responsible for the delivery of the MDP who endeavoured to communicate effectively with the officers and to assist officers with their learning. Holmberg's (1999) expanded theory of distance education embraced learning theory, teaching practice and an acknowledgement of the importance of what was central to a student's success in the form of student support.

2.2.3.4 Equivalency Theory

The fourth category of distance education theories relevant to this study based on the MDP was that of equivalency theory developed by Simonson et al. (1999). Central to Simonson et al.'s theory was the belief that learning experiences should be equivalent for each learner.

The theory was based on the following definition of distance education as

formal, institutionally-based educational activities where the learner and teacher are separated from one another, and where two-way interactive telecommunication systems are used to synchronously and asynchronously connect them for the sharing of video, voice, and databased instruction (Simonson 1995, p. 12).

Key elements to equivalency theory were the concepts of equivalency, learning experiences, appropriate application, students and outcomes (Simonson et al. 1999).

- Equivalency. Because the environments in which students study will be different in each circumstance, experiences using the same resources for each student must be provided;
- Learning Experiences. It is important that the learning experiences provided for each student meet that student's needs and those different elements must be provided where appropriate to ensure this outcome;
- Appropriate Application. Central to this notion is that learning experiences should be appropriate and timely. This addresses the issue of expectations of the learner being supported by the most relevant facilities such as not requiring collaborative learning strategies when an individual student is isolated;
- Students. A student's geographic location should not be an issue. A student should be defined by enrolment in a course; and
- Outcomes. Outcomes refer to the obvious, measurable and significant changes that occur cognitively and affectively in learners because of their participation in a course of study. There are two categories of outcomes. One category is instructor-determined and outcomes are usually stated as goals and objectives and identify what learners should be able to accomplish after the learning experience that they could not accomplish prior to the learning experience. The second category refers to learner-determined outcomes and is less specific, more personal, and relates to the learner's personal goals.

Central to Equivalency Theory was the belief that students enrolled in distance education programs should receive the equivalent benefit they would receive in a traditional learning environment. Simonson et al. (1999) believed this was fundamental to the acceptance of distance education as mainstream. This refers to the American context and Simonson et al. note the importance of using interactive telecommunications systems for success.

Simonson et al.'s theory complemented the contributions of the other theorists, and introduced the notion of equivalency to the process of delivery by distance education mode. Such a feature was significant for the delivery of the MDP particularly as completion of this program was a requirement for officers who sought promotion in a merit-based context. It was imperative that all officers were offered similar opportunities to gain the management knowledge that would assist them to perform well, not only at interview for promotion, but when promoted to a higher rank as well.

2.2.4 Synthesis of Distance Education Theories and Their Relevance to the Management Development Program of the Queensland Police Service

Each of the above four categories, which comprise the theoretical structures of distance education identified as important for this thesis, contributed in some way to developing a clearer theoretical foundation for the delivery of the MDP. The key issues for this study were the factors that affected participation and performance with police officers undertaking the program by distance education, and the mode of delivery was a significant consideration for all stakeholders.

Consideration was initially given to the theories of independence and autonomy, and Delling's (1996) theory, which fell within this category offered the most comprehensive basis for this study of distance education. This was because it embraced the learner, the need from a societal perspective for the program of learning, the role of the organization sponsoring the learning, the objectives for the learning, the content to be learned, the results of learning or what is currently referred to as learning outcomes, the notion of distance in the provision of the educational experience and the use of a signal carrier for the delivery of the program. In the context of this study, all of the above features were embedded in the provision of the MDP by the QPS.

Delling (1996) emphasised the importance of the role of the sponsoring organization as a helping organization, one that supported the learner, the importance of two-way conversation between teacher and learner and consideration for the independence of, and

autonomy for, the learner. For this study it was imperative that the social and contextual qualities of the sponsoring organization, which was the QPS, were aligned with the needs of the officers and the appropriate resources were provided to support the delivery of the MDP.

Wedemeyer's (1968) theory was also one of independence and autonomy and the central focus was the issue of the democratic social ideal and a liberal educational philosophy by which a student was entitled to an education. This was irrespective of issues such as geographic location, poverty, social disadvantage or any other factors that may have inhibited a student's attendance at an educational institution. This was of central importance for this study because of the compulsory nature of this program of study in that the completion of the program was a requirement for officers who sought promotion within the QPS. Because of this characteristic, the opportunity to undertake the program had to be available to all eligible officers irrespective of their geographic location in Queensland.

Also, central to Wedemeyer's (1968) theory was the importance of the learner, the educational institution which sponsored the learning, or as Delling (1996) described it, the helping organization, the content of the program, and the mode of transmission of the material. Wedemeyer also placed considerable importance on the independence of the learner, and his or her ability to take responsibility for the pace of learning.

Also, within the category of theories of independence and autonomy, Moore (1973) emphasised the elements of learner, teacher and method of communication and that there were considerable differences in each of these elements of distance education from traditional face-to-face delivery. Moore placed considerable emphasis on the role of the instructional designer to ensure that the content of programs was presented in an appropriate way for learning at a distance. Coupled with this was the need for instructional designers to address the importance of a learner's need for independence and self-direction while undertaking the learning experiences. Moore's theoretical contribution was particularly relevant to the delivery of the MDP because many participants were

geographically isolated, and were expected to gain competency as independent learners and in being self-directed as they progressed through the program.

Central to these three theories of independence and autonomy were the elements of the learner, the organization sponsoring the learning, the content to be learned, and the mode of delivery. Delling (1996), Wedemeyer (1968) and Moore (1973) also placed considerable emphasis on the autonomy of the learner, and the importance of acknowledging his or her independence in the learning experience.

The second category of theories of distance education was Peters' (1973) theory of industrialisation, which was based on economic and industrial theory, and had application with regard to the MDP, particularly when seeking to develop a theoretical foundation as a basis for operation. Peters' notion of mechanization had application because the program could not operate without machines to produce and package the material. While any educational program offered through the distance education mode required conceptual innovation, technical and organizational innovation was also essential to the effective operation of the program.

Peter's (1973) notion of assembly line was appropriate because of the effort required by many individuals in the production and delivery of the program. Preparatory work, planning, organization, scientific control methods, formalization, change of function, and objectification were relevant to the overall operation of the delivery of the program. Flexibility was also essential to an efficient operation, particularly with regard to ensuring that developments within the QPS that impacted on the roles of individual officers in operational contexts were incorporated into the material. Such developments impacted on the currency of the material and there had to be potential to upgrade material in a short time frame.

Clearly, efficiency in the method of production and the timely distribution of material was fundamental to the success of any distance education program including the MDP.

Scientific control methods, particularly in relation to the timely production and distribution of learning materials, were a contributing factor to the efficient and effective operation of

the MDP, and it was important that officers had confidence in the QPS that sponsored their study.

Within the third category of theories of distance education, theories of interaction and communication, Baath's (1979) theoretical and empirical contribution to the concept of two-way communication in correspondence education had implications for the delivery of the MDP. This was because of the nature of the student, the industrial nature of the program, which made it a compulsory activity for officers who wanted to be eligible for promotion, and because for many students the commencement of this program was his or her introduction to studying at a distance. Baath's (1979) emphasis was on the instructional design techniques that were incorporated in the learning guides to assist student learning and the role of the tutor, or facilitator in offering support to individual students. Baath also placed considerable emphasis on the importance of student support and the extrinsic motivation of students.

Holmberg's (1974) theory also fell within the theories of interaction and communication and he placed emphasis on the importance of the learning experience for each individual learner while acknowledging the cognitive, affective and psychomotor aspects of learning. The notion of student support was also fundamental to Holmberg's theory particularly in regard to a facilitator's role in guiding the learning process. As with Baath's (1979) theory, motivation of the learner was seen as fundamental to Holmberg who believed that students could be motivated through enjoyment of the learning process. Holmberg also believed that learning could be meaningful through the distance education mode, and that students could be encouraged to research, and to be analytical and critical in their learning. Such aspects were particularly relevant to the MDP as it was offered at postgraduate level.

Simonson et al.'s (1999) equivalency theory was the fourth category of theories of distance education to be considered for the delivery of the MDP. This theory reflected contemporary adult education theory in that it acknowledged the needs of the learner with regard to the content of the program. There were also elements of Wedemeyer's (1968) democratic social ideals in Simonson et al.'s theory in that they believed that all students

should receive equal benefit from the learning experience, irrespective of where and how the content was delivered.

Simonson et al. (1999), in line with Delling (1996), acknowledged the importance of learning outcomes for each student, and like Holmberg (1974) placed emphasis on cognitive and affective outcomes for the learner. Simonson et al. extended their theory to embrace a second category of learner-determined outcomes which related to the learner's personal goals, and this was relevant to the MDP as officers were encouraged to apply management theories learnt through the program to individual workplace issues and contexts.

While elements of all four categories of theories of distance education were found in the MDP, this program was unique in the theoretical context of distance education just as the client group was unique. Similarly, the needs of managers in this policing context were unique. Studies that explored issues relating to the most effective theoretical foundations of education delivery for officers of the QPS studying at a distance did not exist. The purpose of this study was to address the issue of educational provision in the distance education mode in the context of the study of factors that affected participation and performance of police officers undertaking the MDP offered by the QPS.

Several factors were considered within the context of this study, with particular emphasis given to those that affected the participation and performance of officers who undertook the MDP. One factor was the motivation of the officer to engage in the program. The nature of this program was that it was industrially driven and compulsory for police officers who wished to seek promotion. The MDP was based on a Commissioner's Circular 3/99 (Appendix D, Section 16.2 Human Resource Manual) and was delivered under the direction of the QPS. The objective of the program was to ensure that managers within the QPS had the skills to assist the service to achieve goals of the QPS Strategic Plan, and the content of the program was based on contemporary management theory with direct application to a policing context. Learning outcomes for each module within the program were specific to the rank of sergeant, senior sergeant or inspector. The program was

offered in distance mode with strict financial constraints. Support for officers' learning was an integral part of the delivery strategy.

Issues of particular importance to the managers of the program included how to provide extrinsic motivation for officers, how to promote two-way communication with those officers who resented having to complete the program or who feared study, particularly in the distance education mode, and how to incorporate appropriate distance education techniques in the design of material. A further issue was the enhancement of the delivery of the program and inherent in such delivery was the use of the distance education mode and the incorporation of the most effective distance delivery techniques as outlined in this review of the literature. All theories discussed in this review have relevance for the delivery of the MDP.

2.3 LEARNING ENVIRONMENTS FOR ADULT LEARNERS STUDYING IN THE DISTANCE EDUCATION MODE

2.3.1 Introduction

As stated earlier in this thesis, the focus of this study was to determine factors that affected participation and performance of officers of the QPS who were enrolled in a MDP offered in the distance education mode. To address this objective, the nature of learning environments was explored, with specific attention given to a review of the literature related to learning environments for adult learners in distance education contexts.

The goal of any distance education program must be to provide the most meaningful experiences possible, at a distance, taking into account the backgrounds of the students, their needs, motivations, abilities, and the way individuals prefer to learn. Appropriate instructional design techniques, the most appropriate media and technology available and the most appropriate student support mechanisms must also be incorporated in the educational plan of institutions delivering by the distance education mode. As Laurialliard, (1994, p. 26) states the challenge for educators is "... to help students go beyond their

experience, to use it and reflect on it, and thereby change their perspective on it, and therefore change the way they experience the world." To be effective, a distance education program must acknowledge the importance of a positive and supportive learning environment as a context for the delivery of the program. Within the literature reviewed, it was found that the terms *learning environments* and *educational climate* have been used to describe those social and cultural variables that impact on an individual learner.

A review of the learning environment literature found significant contributions from primary and secondary schooling contexts, and more recent studies related to higher education environments. Little research had been conducted on distance education programs generally, and no research has been conducted on management education programs for police officers in the distance education mode.

2.3.2 Historical Background to Learning Environment Theory and Measurement

Significant research on formal learning environments has been conducted within the field of environmental psychology. Theoretical, conceptual and measurement foundations of classroom environments were found in the work of Lewin (1936), Murray (1938), and Pace and Stern (1958). Classroom environment research has been conducted principally in schools. Some key researchers in this field have been Bell, Fisher, Baum & Greene (1990), Dorman (1997, 2000), Fraser (1986, 1994, 1998a), Moos (1979), Weinstein (1981) and Walberg (1979).

While significant research on formal learning environments has been conducted within the field of environmental psychology, such research has principally been in the field of formal school environments of children and adolescents such as Bell, Fisher, Baum & Greene (1990), Dorman (1997), Fraser (1986), Gifford (1987), Gump (1987), Moos (1979), Walberg (1979) and Weinstein (1981). Pioneers in the field of learning environments include Lewin (1936), Murray (1938), and Pace and Stern (1958).

The basis for Lewin's (1936) theory was that researchers must address the interrelationship of the person in the environment. Lewin (1935, p. 25) saw that "behaviour (B) was a function of the person (P) and the environment (E), B = f (P,E), and that P and E in this formula are independent variables." For Lewin "the field with which the scientist must deal was the *life space* of the individual and this life space consisted of the person and the psychological environment as it existed for him" (Cartwright, 1975, p. xi). Behaviour was seen as a function of the person and the environment (Lewin, 1935), and as Hall and Lindzey (1978) note Lewin saw behaviour as a function of the field that existed when the behaviour occurred. Stern (1964) supported Lewin's theory because he believed that the psychological significance of either the person or the environment could only be inferred from one source, and that was behaviour. Lewin's field theory was seen as the beginning of a set of concepts "that could be used to represent fundamental psychological processes and reality" (de Rivera, 1976, p. 4).

Murray (1938) extended Lewin's work and proposed a *needs-press* model. The term *need* applied to characteristics of individuals and *press* to environmental factors that impacted on the individual. Stern (1970, p. 7) believed needs could be identified as "taxonomic classification of the characteristic spontaneous behaviours manifested by individuals in their life transactions." Further Stern (p. 7) believed "the concept of environmental press provided an external situation counterpart to the internalized personality needs." To Stern (p. 7) press referred to "the phenomenological world of the individual, the unique and inevitably private view each person has of the events in which he takes part."

Pace and Stern (1958) extended Murray's work on environmental press by applying the logic of *perceived climate* to study the *atmosphere* of colleges and universities, and developed objective measures of environmental press. Stern, Stein and Bloom (1956) extended Murray's work on alpha and beta press, and referred to detached observer perspectives (alpha press), shared views (consensual beta press) and private views (private beta press) that participant individuals and groups have of a particular situation. To Pace and Stern (p. 269) the concept of press "offers a way of viewing the environment which is comparable analytically and synthetically to the more familiar ways of dealing with the

individual." Pace and Stern (p. 269) viewed a college environment as "a system of pressures, practices and policies intended to influence the development of students toward the attainment of important goals of higher education."

Stern's (1958) contribution to learning environment research included the construction of the Activities Index as well as a test to describe college environments called the College Characteristics Index which addressed such issues as the curriculum, college teaching and classroom activities, rules, regulations and policies, student organizations, activities and interests and features of the campus.

Moos (1979), another significant contributor to the field of classroom climate research, evaluated the social environments of educational settings and noted that the "social environment has important effects on students' satisfaction, learning and personal growth." Moos developed social-climate scales and, in particular, the Classroom Environment Scale (Moos & Trickert, 1987). Moos found that different types of dimensions of social environmental stimuli could be distinguished, and that such dimensions could affect psychological processes and behaviour. Moos also found that the effects of different types of dimensions could vary from one individual to another.

Fraser (1986, 1989) and Fraser and Walberg (1991) investigated the determinants of climate and the effects in terms of teacher satisfaction and student learning. Fraser considered whether teachers could assess the climate of their classrooms and use what they had learned to change the environment. He also considered whether new curricula could be evaluated, in part, in terms of their impact on classroom environment. In relation to classroom environments in post-compulsory education, Fraser (1983) reported on one classroom environment instrument, the College and University Classroom Environment Inventory. Fraser believed this instrument provided a useful source of criteria in the evaluation of attempts to meet the needs of students in the post-compulsory sector by creating appropriate pedagogical and psychological learning environments.

In Rosenshine's (1970) contribution to measuring classroom climate, he distinguished between *low inference* and *high inference* measures of classroom environments. *Low inference* measures focussed on specific explicit phenomena (such as the number of questions asked by students) while *high inference* measures focussed on psychological significance of classroom events and required judgement on the part of the respondent.

Thomas (2002) has also contributed significantly to research through his work on the metacognitive orientation of learning environments and conceptualised, developed and validated the Metacognitive Orientation Learning Environment Scale – Science (MOLESS) to measure the extent to which the learning environment supports the development and enhancement of students' metacognition. MOLES-S is a seven scale instrument developed to assess metacognitive demands, student-student discourse, student-teacher discourse, student voice, distributed control, encouragement and support and emotional support.

2.3.3 Recent Directions in Learning Environment Research

Dorman, Fraser and McRobbie (1997) contributed to the field of learning environment research through the development of instruments designed to assess student perceptions of classroom psychosocial environment in Catholic schools. Dorman (1998) reported his development and validation of an instrument, the *University-Level Environment Questionnaire* (ULEQ), to assess institutional or university-level psychosocial environments in universities. Dorman (2000, p. 25) extended his previous work with the *University-Level Environment Questionnaire* and reported that "validation data showed that scales of the ULEQ have satisfactory internal consistency, sensitivity to different department environments and minimal overlap." Fraser and Treagust's (1986) College and University Classroom Environment Inventory formed the basis for the Joiner, Malone and Haimes' (2002) assessment of classroom environments in reformed calculus education. This instrument was used to determine if current reforms in calculus were more inclusive of students of different genders, personalities, attributional beliefs, mathematical abilities and computer attitudes.

Significant contributions to the field of learning environment research have also been made by Nair and Fisher (2001) and Koul and Fisher (2002). Nair and Fisher's study reports the first use and validation of a modified and personalised form of the College and University Classroom Environment Inventory. This study was focussed at the senior secondary and tertiary levels of education and compared both students' and instructors' actual and preferred perceptions of their classroom learning environments. The study also considered students' and instructors' attitudes towards their courses. India was the focus for Koul and Fisher's study where multiple research methods from different paradigms were used to explore the nature of science classroom environments. Koul and Fisher used the *What is Happening in This Class* (WIHIC) questionnaire and attitude scale as the first part of the study that was followed by interviews and observations that determined a more in-depth understanding of classroom climate. Koul and Fisher described the social, cultural, economic and political factors that may contribute to prevailing learning environments.

A review of learning environment literature revealed that the study of adult learning environments was a relatively young field. It was clear that there was limited knowledge about the interrelationships between formal learning environments and adult behaviour and experience, particularly with regard to learning in the distance education mode. Studies related to adult learning environments within distance education programs with a focus of management education for serving police officers had not been conducted.

2.3.4 Elements of Learning Environments in Adult Education

A review of the literature found that the study of learning environments was related to the ways in which physical, interpersonal and sociocultural aspects of the environment affected, and are affected by an individual's behaviour and experience (Wapner & Demick, 1991). Ennis et al. (1989, p. 76) believed that educational climate "represents the social and contextual qualities of an organization as perceived by the participants." In addition, while their research referred to schools, Anderson (1982) and Owens (1987) believed that the culture of a school defines a school's climate.

Demick and Nazzaro (1994) contributed to the understanding of formal learning environments for adults through their development of Werner's (1957) organismic-developmental approach. Central to Demick and Nazzaro's belief was that every individual was inextricably embedded in some environment, and that each individual and each environment must be considered in the context of the two elements. Demick and Nazzaro emphasised the holistic nature of the individual in his or her environment and that the environment embraced such elements as physical (home, school, work); interpersonal (family, co-workers, teachers, fellow students); and sociocultural (household, work and school rules). Other important aspects that relate to the individual, as noted by Demick and Nazzaro, include biological/physical (health); psychological/interpersonal (self-esteem) and sociocultural (roles). Demick and Nazzaro (p. 140) noted "these aspects of the person in conjunction with the aspects of the environment are assumed to constitute the person-in-environment system."

A study of learning environments was significant to the focus of the present study, viz. the MDP of the QPS, because of the nature of the officers who enrolled in the program and the distance education nature of the delivery of the program. Many officers had very limited exposure to academic reading or writing prior to enrolling in the program and undertook the study in addition to full-time operational responsibilities.

Learning environments were also found to be important in distance education programs for the cognitive and affective outcomes for students. Several studies indicated that the cognitive outcomes for students studying at a distance were comparable with the outcomes for students studying in traditional classroom settings (Wagner & Craft, 1988). While it was found that the cognitive outcomes for students studying in both modes were comparable, it was noted that affective experiences of students in both groups differed considerably. Researchers such as Hunt (1987) reported that positive affective experiences are related to positive cognitive outcomes for students. McLoughlin (2002) reported research related to learner support in distance and networked learning environments and offered a conceptualization of Vygotsky's (1978) term *scaffolding* in distance learning.

McLoughlin offered suggestions for supporting learners in the processes of constructivist inquiry in a range of learning settings.

This importance of positive cognitive and affective outcomes for students was of particular significance for this study. While the objective of the MDP was to increase the management abilities of police officers, it was appreciated that the actual experience of study impacted on how officers translated what they had learned into practice in their workplaces. This, in turn, had particular significance for the overall achievement of the strategic goals of the QPS. Organizations generally, and the QPS in particular, realised that the ultimate success of an organization in achieving its aims depended upon the skill of management to use its finite human and financial resources effectively. Further, the QPS required managers at all levels to operate in increasingly complex work environments, and to possess the knowledge to operate effectively and ethically as demanded by the wider community.

Dahlgren (1998) reinforced the importance of effective interaction with students when he acknowledged that, in the distance education context, interaction with students had to be incorporated into the material when it was developed. In addition, the potential for the development of social relationships must be created in the learning material and in the media. Teachers had to be aware that teaching and guidance could be implemented in the material, and thus bridge the gap between teacher and student (Dahlgren). This understanding of student-teacher interaction was significant for this study because the teachers (who were referred to as facilitators within the MDP) came from civilian and police service backgrounds.

Waghid (1998) emphasised the importance of dialogue in the process of educating at a distance and added that dialogue

...is the creative process in which entirely new ways of thinking and acting will emerge. Dialogue is a space of deep thinking, where there is nothing to provide, where well-worn ways of thinking and being can be let go of. In a dialogue there is nothing to be solved and nothing to be defended (Isaacs, cited in Qualters, 1995, p. 50).

Waghid (1998) believed a dialogue between teacher and learner could effect an improvement within the teaching/learning process in two ways. First, teachers developed greater empathy and sensitivity to the concerns of students. Second, sufficient levels of intimacy and comfort could be established in order for the teacher and learner to understand each other's perspectives and interests. Recent research by Roblyer and Wiencke (2003) reinforces the importance of interaction as an essential characteristic of successful distance learning courses and outlines the design and use of a rubric to assess and encourage interactive qualities in distance courses.

The issue of dialogue was important in this study and facilitators were aware of the importance of different forms of dialogue with officers enrolled in the program. Formal tutorials that had been conducted by telephone-conference facilities were suspended in 1998 because of lack of funding, and the avenues open to officers and facilitators for two-way communication were through direct telephone conversations, email and paper-based communication. Officers enrolled in the program were welcome to visit the Police Academy in Brisbane at any time for one-to-one consultation with a facilitator.

Waghid (1998) extended the issue of learner autonomy to include the element of critical reflection. To improve the teaching/learning process, Waghid believed the elements of "information acquisition, critical reflection and critical discourse" as proposed by Anderson and Garrison (1995, p. 197) should be incorporated into distance education programs. To support this view, Anderson and Garrison (p. 138) stated that distance education programs should encourage learners "to critically reflect about their learning and to pursue an interactive social distance education discourse." Waghid extended his argument for excellence in the provision of distance education programs, to embrace the role of the teacher, with the belief that within a teaching/learning environment, space must be created for learner autonomy to prevail. Critical self-awareness of both teacher and learner must also be invoked. This was attempted in the MDP through the way assessment items were constructed, and through the way officers were encouraged to communicate with

facilitators about the practical application of the theory that had been presented in the learning material.

Because of the importance of factors related to participation and performance of officers who enrolled in the MDP, this literature review also addressed the issue of persistence of students. While theoretical models to explain student retention have been proposed by Astin (1975), Gosman, Dandridge, Nettles and Thoeny (1983), Pascarella and Terezini (1991), Terezini and Pascarella (1977) and Tinto (1975), limited attention has been given to the relationship of student persistence with social climate. Studies of students who dropped out of courses of study had both a psychological and a sociological foundation. Models such as those offered by Rossman and Kirk (1970), and Waterman and Waterman (1972) emphasised the roles of personality and disposition in a student's ability to adapt to an institution of higher learning. Such researchers viewed student departure as a reflection on an individual's ability to adjust.

Sociological theories considered the influence of the environment on an individual's behaviour. Such theories saw student departure not just as the student's decision but also as a combination of several factors including the student body generally and the educational institution. Pincus (1980) saw student departure as part of the larger process of social stratification, which included issues such as race and gender. Other researchers such as Featherman and Hauser (1978) saw a direct link between an individual student's ability to compete in an academic context and the influence of the institution.

Lovitts (1996) argued that attrition had less to do with what students bring to a tertiary institution than what happened after admission. Rendon and Hope (1995) believed that educational institutions must create conditions for optimal learning. Support for positive learning environments was also found in Roueche, Baker and Rose (1989) who stated that competitive, isolated environments posed difficulties for minority-group students.

Self-efficacy must also be addressed in the context of student retention. Bandura (1986) referred to self-efficacy as one's judgement about one's ability to organize thoughts,

feelings and actions to produce a desired outcome. From an institutional perspective self-efficacy was defined as a student's degree of confidence in performing various college-related tasks (Solberg et al., 1993). Other researchers in the field of self-efficacy, as it related to college retention, included Lent, Brown and Larkin (1984) and Multon, Brown and Lent (1991).

Tinto's (1975) model of student retention provided a popular conceptualisation of the attrition issue in higher education. Tinto viewed colleges and universities as organizations comprised of two interacting systems – an academic system and a social system. Tinto's model derived its strength from Durkheim's conception of solidarity. According to Liu and Liu (1999) entrance into a new society necessitated, to varying degrees, a severance of ties to an individual's past society. This severance of ties catalysed the creation of anomie, or a state of confusion and insecurity, that could lead to anomic suicide in the form of student departure. Kember (1989) adapted Tinto's model to nontraditional forms of educational delivery. To Kember the relevant issues were the importance of social and academic integration to successful student progress while studying in the distance education mode. Important to this study were the additional factors that motivated students who studied by distance education to persist with their studies, apart from the compulsory nature of the program, and that successful completion of the program was mandatory for those officers who sought promotion.

Tinto (1987) believed that responsibility for successful student retention rested with the institution and its faculty and staff. Dunwoody and Frank (1995) supported Tinto's notion and emphasised the need for institutions to acknowledge the social as well as the intellectual development of students. Bajtelsmit (1988) as quoted in Peters (1992) suggested that the distance student's life circumstances could affect a student's decision to discontinue study. This was relevant for the MDP because all officers who undertook the program were employed on a full-time basis.

A significant contributor to the field of literature relating to andragogy - the education of the adult learner was Knowles (1990) who highlighted the importance of climate in adult education environments. Knowles emphasised both the physical and psychological dimensions of the learning environment. Central to Knowles' andragogical model were several key elements:

- adults needed to know why they needed to learn something;
- because of the nature of the adult learner's self-concept, an adult needed to be seen by others as capable of self-direction;
- recognition must be given to previous learning and experience when educating adults;
- adults were more receptive to learning when they had a need to know what was being offered;
- an adult's orientation to learning was life-centered or task-centered; and
- while motivation to learn for adults could be extrinsic, intrinsic motivation was more effective.

The implications of Knowles' (1990) model for the present study are five-fold. How an adult learned, factors that affected student retention, the issue of student self-efficacy, and the adult student's attitude to, and motivation for study were all significant for the present study of participation and performance of police officers who undertook the MDP within the QPS. The attrition rate of officers in some units was as high as thirty percent, and this was unacceptable from a student perspective as well as from a budgetary and officer career-progression perspective for the QPS.

2.3.5 Synthesis of Learning Environments for Adult Learners Studying in the Distance Education Mode

The central theme of this review of the literature relating to learning environment research has been to consider how educators can enhance learning environments, or classroom climate so that student-learning outcomes can be improved. Literature has also focussed on the measurement of learning environments to achieve the same objective. Significant research has been conducted within primary and secondary school contexts, and there was evidence of research at the higher education and university levels, particularly about the measurement of learning environments in such educational institutions.

Fraser and Walberg (1991) and Fraser (1986, 1989) focussed on the determinants of climate and the effects in terms of teacher satisfaction and student learning. Fraser's interests centred on how teachers could assess the climate in their own classrooms, and use such information to provide a more effective climate, with enhanced student outcomes. Fraser using the College and University Classroom Environment Inventory also conducted learning environment research in the post-compulsory sector. The research of Rosehshine (1970), Dorman, Fraser and McRobbie (1997) and Dorman (2000) has been discussed and it has been shown how these researchers contributed to learning environment research with particular emphasis on the development and validation of instruments, particularly within university environments.

Research relating to learning environments and the development of instruments to measure environments in primary, secondary and university environments served as a valuable foundation for this study which was based on adult education in the distance education mode. While facilitators within the MDP, on which this study was based, did not have face-to-face interaction with officers enrolled in the program, it was the responsibility of facilitators and managers of this program to ensure that an effective learning environment was offered. This included ensuring that all personnel involved in the program were approachable, that appropriate support was provided to officers, that the learning materials were user-friendly, that the content of the program was relevant and current, and that the learning environment was conducive to positive student outcomes.

Much of the literature that focussed on adult learners by such researchers as Demick and Nazarro (1994) was based on Werner's (1957) organismic-developmental approach. Demick and Nazzaro believed that every individual was inextricably embedded in some environment and that each individual and each environment must be considered in the context of the two elements. Demick and Nazzaro focussed on the holistic nature of the individual and considered such elements as the physical, interpersonal and sociocultural aspects of the environment in which the individual operated. When considering the

distance education context, Bajtelsmit (1988) considered that the student's life circumstances were important when a student considered terminating study.

Researchers such as Ritchie and Newby (1989) and Wagner and Craft (1988) reported that while cognitive outcomes for students studying within the distance education mode were comparable with outcomes for students studying in traditional classrooms at universities, affective outcomes for students differed considerably. In the main, Ritchie and Newby and Wagner and Craft concluded that students studying in the distance education mode derived affective outcomes from their study principally through the cognitive stimulation of the study and the cognitive gains made, while students who studied on campus derived affective outcomes from the stimulation of interaction with other students and lecturers.

Dahlgren's (1998) research investigated how material should be developed for students to allow for positive interactions between lecturer and student. Waghid (1998) contributed to this issue with his findings related to the importance of dialogue in the process of educating at a distance. Waghid stressed the importance of learner autonomy in the distance education mode, and also the importance of critical reflection on the part of the learner. Anderson and Garrison (1995) also advocated the notion of critical reflection. Such contributions were significant for this study because of the need to engage officers in their learning through the learning materials because of the unavailability of funding to conduct telephone tutorials or video conferencing to allow facilitators to engage with officers and to assist their learning in this way.

The literature related to student attrition was particularly significant for this study because of the unacceptably high dropout rate of officers enrolled in the program. Sociological theories as reported by Featherman and Hauser (1970), Lovitts (1996) and Pincus (1980) generally applied to courses offered in the on-campus mode. Rossman and Kirk (1970), Tinto (1975), and Waterman and Waterman (1972) stressed the importance of the student experience after enrolment, and this was of particular significance for this study because of the necessity for student support offered by facilitators of the program. Researchers such as Bandura (1986), Solberg, O'Brien, Villareal, Kennel and Davis (1993), and Multon, Brown

and Lent (1991) noted the issue of self-efficacy and student retention. This was significant for this study because many officers had not undertaken study previously and for some officers, their lack of confidence resulted in termination of study.

Research relating to the role of the adult learner by Knowles (1975, 1984, 1990) was significant for this study because of the elements of his theory of adragogy. Such elements included the need for an adult to know why they needed to learn something; the learner's self-concept; the importance of giving consideration to a learner's previous learning experiences; understanding why the content to be learned was relevant; the life-centered nature of an adult's orientation to learning and the intrinsic nature of motivation of the adult learner.

Literature reviewed supported the theoretical perspective of this study in relation to the importance of adapting the sound theory inherent in the four theories of distance education cited, ensuring a positive learning environment in the delivery of education programs, and the importance of incorporating sound adult learning principles in the delivery of programs. There were gaps, however in the literature particularly about learning environments in programs offered in the distance education mode for adult learners. Significant study had occurred with adult learning environments generally, and the issues of student attrition and student self-efficacy, but these studies concentrated on delivery in the on-campus mode. There were no studies found that focussed on learning environments for delivery in the distance education mode, of management education programs for police officers. This study sought to address this gap in knowledge through a study of the factors that affected the participation and performance of officers undertaking the MDP within the QPS.

2.4 CONCLUSION

The literature review for this study has been drawn from the two major fields of distance education and learning environment theory. Definitions of distance education have been provided and the theoretical structures of distance education based on Moore (1973), Delling (1996) and Wedemeyer's (1968) theories of independence and autonomy; Peters'

(1973) theory of industrialisation; Baath (1979), Holmberg's (1974) theories of interaction and communication and Simonson et al.'s (1999) equivalency theory have been provided. These theories have been discussed in relation to the delivery of the MDP on which this study was based. A synthesis of the four main distance education theories has been provided.

The second major field to be reviewed was that of learning environment research. An historical background to learning environment theory and measurement has been provided of the work of pioneers such as Lewin (1936) who saw behaviour (B) as a function of the person (P) and the environment (E), and Murray (1938) who extended Lewin's work. Murray proposed a *needs-press* model where the term *need* applied to characteristics of individuals and *press* to environmental factors that impacted on the individual and Pace and Stern (1958) who extended Murray's work on environmental press by applying the logic of *perceived climate* to study the *atmosphere* of colleges and universities and developed objective measures of environmental press.

The significant contributions to recent directions in learning environment research by researchers such as Dorman, Fraser and McRobbie (1997) and Dorman (2000) through their work on measurement instruments designed to assess student perceptions of classroom psychosocial environments has been discussed. Recent contributions by Nair and Fisher (2001) and Koul and Fisher (2002) have also been included.

A review of literature of elements of learning environments in adult educational contexts based on the work of Demick and Nazzaro (1994) through their development of Werner's (1957) organismic-developmental approach has also been provided. Literature about learning environments and the cognitive and affective outcomes for students has been reported and was based on the work of Ritchie and Newby (1989) and Wagner and Craft (1988). Research based on the work of Dahlgren (1998) focussed on the importance of effective interactions between students and facilitators and the importance of dialogue based on the work of Waghid (1998) has been discussed. The issue of student attrition has been discussed. Theoretical models as proposed by Tinto, Terezini and Pascarella (1997),

and Gosman, Dandridge, Nettles and Thoeny (1983) have been discussed. Sociological theories, based on the work of Pincus (1980) and Featherman and Hauser (1978) that considered the influence of the environment on an individual's behaviour have also been included. Consideration was also given to the contribution by Knowles (1990) to the theory of andragogy because of the emphasis he gave to the importance of climate in adult education environments. A synthesis of learning environments for adult learners studying in the distance education mode has been provided.

This chapter has addressed the fields of distance education theory, learning environment research and adult learning theory that formed the theoretical basis for this study. The focus of research questions in this study was factors that influenced participation and performance of officers of the QPS who undertook a study of management in the distance education mode and the overall objective was to make recommendations to enhance the educational outcomes of officers who enrolled in the program. All research questions focus on the distance education mode of delivery, the learning environment for adult learners studying in the distance education mode and adult learning theory. This review of the literature has established a gap in the knowledge about management education programs offered for police officers in the distance education mode. The following chapter draws on the review of this literature in the formation of a conceptual framework designed to respond to the major research questions as outlined in Chapter 1 of this study.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

In this chapter the major research questions are presented and a conceptual framework is developed for responding to those questions. The questions are derived from the purposes of the study set out in Chapter 1 and the review of the literature as provided in Chapter 2.

The following research questions form the basis for this study:

- 1. What are the key factors that influence participation and performance by officers of the QPS undertaking the MDP by distance education?
- 2. Can valid scales to assess the factors that influence participation and performance by officers undertaking the MDP be developed?
- 3. What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP?
- 4. Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?
- 5. What are the implications of the study for enhancing the delivery of the MDP?

Both qualitative and quantitative research techniques were used in this study, a process known as rapprochement (Ary, Jacobs, & Razavieh, 2002). The way both methods have been combined in this study is reported by Hammersley (1992) as using one method as the

groundwork for the other method. There were three distinct phases to the research design. Qualitative research methods were used in Phase 1 of the study to determine the scales and dimensions for the quantitative component of the study in Phase 2. Data from both the first and second phases of the study informed the third phase where a qualitative method was used again.

To permit the five research questions to be answered, research methods chosen for this study were designed to collect data from facilitators involved in the delivery of the program in Phase 1 (a qualitative approach that employed semi-structured interviews). A total of six facilitators were interviewed about their perceptions of factors that impacted on the participation and performance of officers undertaking the MDP. Their perceptions were used as the basis for the questionnaire that was developed for distribution to police officers who had completed at least one unit of the MDP. Officers were asked to complete the questionnaire in Phase 2, (a quantitative approach), and in Phase 3 the manager and head of the School of Management of the MDP were interviewed using semi-structured interviews (a qualitative approach). Phases 1 and 2 of the data collection process directly addressed Research Question 1 that sought the determining factors of participation and performance by officers of the QPS undertaking the MDP by distance education.

The second research question was essentially an empirical question, and asked whether valid scales could be developed to assess the factors that influenced participation and performance by officers undertaking the MDP. Research Question 3 sought the relationship between an officer's characteristics and the factors that influenced participation and performance in the MDP. Research Question 4 sought to determine whether a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP could be developed. Phase 2 of the research design answered Research Questions 3 and 4. Police officers at the ranks of senior constable, sergeant and senior sergeant who had completed at least one unit of the MDP responded to the questionnaire.

Phase 3 of the design addressed Research Question 5 that focussed on the implications of the study for enhancing the delivery of the program. A qualitative approach involving interviews with the manager of MDP and the head of the School of Management at the QPS Academy was adopted. These interview schedules were developed from the results of Phase 2

The following sections of this chapter provide a detailed discussion of the methodological issues introduced above. Section 3.2 focuses on the methodological issues that supported the three phases of data collection based on semi-structured interviews and questionnaire administration. Section 3.3 discusses the overall design of the study, the data collection methods employed, variables, units of analysis and data analysis for the qualitative and quantitative components, data collection sites and the research period. Section 3.4 comments on the validity of this research by considering threats to the internal and external validity for all data collection methods employed. A summary of the chapter is provided in Section 3.5.

3.2 METHODOLOGICAL UNDERPINNINGS OF THE STUDY

3.2.1 Philosophical Basis for the Study

Philosophical assumptions that support this study are drawn from both phenomenology (the qualitative components) and positivism (the quantitative component) (Ary et al., 2000). According to Radnor (2001) the role of the researcher employing a phenomenological approach is to attempt to understand and record the meanings that respondents make of their experience. For this study, this approach was operationalised with interviews involving the six facilitators of the MDP who provided data for Phase 1 of the study and the manager and the head of the School of Management who provided data for Phase 3 of the study. As Ary et al. note, the phenomenological approach requires the researcher to focus on the social reality of the research participants while positivists place emphasis on measurement and collecting data with objective techniques. The goal of the qualitative researcher is to elicit information from the participants for later analysis. Neuman (2000, p.

122) notes that qualitative researchers rely on interpretive or critical social science and usually try to present "authentic interpretations that are sensitive to specific social-historical contexts." While scientific inquiry is based on the premise that the study of human phenomena should reflect methods of physical science (Teichman & Evans, 1999), for the purposes of this study drawing on a positivistic philosophical base was appropriate because the use of a questionnaire to collect data from a representative sample of officers was the most efficient way to proceed. The objective was to draw inferences from samples of officers who had completed at least one unit of the MDP and project the results to the entire population of officers who had completed similar study.

This study involved collecting data initially through semi-structured interviews with six facilitators employed within the MDP during Phase 1. These data were used to form insights and generalizations which informed the second phase of data collection which was a questionnaire. In educational research, questionnaires are usually a non-experimental mode of inquiry and for this study the questionnaire was used to describe attitudes, beliefs and opinions of police officers who had undertaken at least one unit of the MDP. The researcher was able to make inferences about the wider population of police officers from the responses provided by those who completed the questionnaire. More data were then collected during the third phase for this study and were based on the concepts generated from the two previous phases of data collection. These data formed the basis of the interview schedule developed for Phase 3.

The process of conducting interviews for Phase 1 of this study, seeking to analyse emerging themes that would contribute to the development of the second phase questionnaire and subsequently analysing data from the questionnaire to provide a basis for the third phase semi-structured interviews was supported by Babbie (1998). Phenomenology and positivism provided the philosophical approaches for the research design for this study, and by employing both phenomenological and positivist research philosophies and incorporating qualitative and quantitative techniques it was hoped this approach would strengthen and enrich the findings from all phases of data collection.

3.2.2 Combined Qualitative and Quantitative Designs

Research methods for this study were based on what Jick (1979) referred to as between methods or triangulation and drew on qualitative and quantitative data collection procedures. Ary et al. (2002) refer to the use of multiple methods to collect data as methods triangulation. The use of this approach was also supported by Gay and Airasian (2003) because the use of multiple methods to collect data should provide stronger evidence for the outcomes of the study. Triangulation was also employed in an attempt to ensure that any bias inherent in particular data sources, investigator and method of data collection would be neutralized when used in conjunction with other methods (Jick). A process of sequential triangulation, as outlined by Greene, Caracelli and Graham (1989) was employed because the second phase of data collection for this study, the use of the questionnaire, was informed by the first phase of data collection, which was the conduct of semi-structured interviews with six facilitators involved in facilitation within the MDP. In this instance the first method was used to inform the second method. Subsequently, the results of the questionnaire were used to inform the development of the interview schedule used in the third phase of data collection for this study.

Triangulation, and particularly sequential triangulation, was employed in this study so that the factors that affected participation and performance of officers could be determined from the perspectives of facilitators of the program, the officers themselves and managers of the program. Additional reasons for using triangulation were supported by researchers such as Denzin (1978), Greene et al. (1989), Mathison (1988), and Swanson (1992). These researchers believe that by using complementary research methods different aspects that otherwise may not emerge from the data collected may be detected. Gay and Airasian (2003) also support the use of triangulation to corroborate data collected during different phases of a study.

The third phase, the interviews with the manager of MDP and the head of the School of Management, was informed by the second, and indirectly by the first phase. Responses gained from the first phase of data collection were essential for planning the second phase

and these were combined in a Likert scale (McBurney, 2001). The items were informed by the qualitative data gained from the first phase. Similarly, the results from the questionnaire in Phase 2 of the data collection process informed the content of the interviews conducted for Phase 3.

This methodological approach was chosen for this study in an attempt to make the most effective use of both qualitative and quantitative research methods, and to understand the social phenomena related to police officers undertaking management study in the distance education mode.

3.3 THE RESEARCH DESIGN

The research design for this study provided the basis for determining the sources and type of information that could be used to answer the research questions (Cooper & Schindler, 1998). According to Fogarty and Hede (1996) there are three fundamental types of research design: exploratory research, descriptive research and causal research. This study has elements of all three types. Phases 1 and 3 were exploratory in nature because the initial six interviews were conducted with facilitators within the MDP and the results of these interviews were used to inform the development of the questionnaire. Subsequent semi-structured interviews in Phase 3 complemented this process. Phase 2 was descriptive in nature and a questionnaire was used to describe the situation of officers' participation and performance in the MDP.

This study is also causal in one sense because of the use of the Structural Equation Modelling. While not strictly causal in the sense of isolating the effect of one manipulated independent variable or dependent variable, strict equation modelling is considered causal as hypothetical path diagrams are analysed through path analysis. It is acknowledged, however that the data employed in structural equation modelling is correlational in nature. Information relating to the overall design of the study has been provided as well as specific data collection methods used in the three phases of data collection. Variables, units of analysis and data analysis for the quantitative component of the study have been discussed.

The sites for the two qualitative phases and the quantitative phase have been described. A final subsection addresses the key periods in which the data were collected.

3.3.1 The Overall Design of the Study

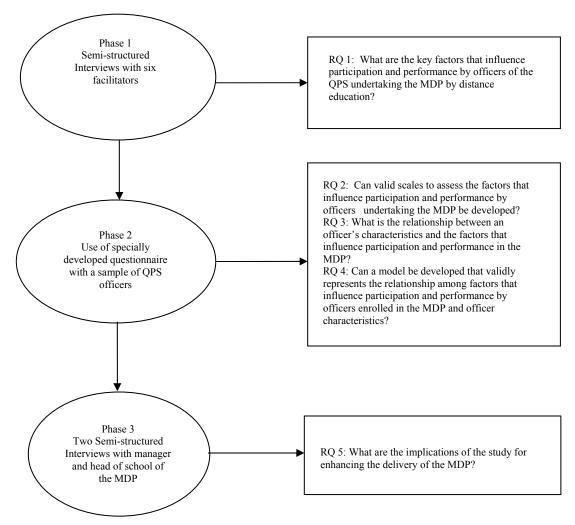


Figure 3.1 Overall Design of the Study

As illustrated in Figure 3.1, there were three phases of data collection for this study. Phase 1 employed a semi-structured interview that was conducted with six facilitators attached to the MDP. This initial work allowed the researcher to become familiar with the perceptions of the facilitators about their experiences with officers enrolled in the program. Data were collected on issues relating to participation and performance of police officers undertaking the MDP including the nature of learning in the distance education mode, factors inherent

in the clinical delivery of the program, the impact the role of policing had on individual officers, and the nature of student support that was required for officers to be successful in the MDP.

Data gained from the first phase were used to inform the development of a questionnaire that assessed the perceptions of officers who had completed at least one unit of the MDP (Phase 2). A third phase of the research for this study was based on the outcomes of Phases 1 and 2, and involved semi-structured interviews conducted with the manager of the program and head of the School of Management. These interviewees were chosen because they were responsible for the delivery of the program, for initiatives to achieve quality improvement and for seeking funding to implement quality enhancement processes.

3.3.2 Data Collection Methods

Both qualitative and quantitative data collection methods were employed in this study. Three phases of data collection were employed. Phases 1 and 3 involved a qualitative approach and a quantitative approach was employed for Phase 2.

3.3.2.1 *Phase 1 - Semi-structured Interviews*. As illustrated in Figure 3.1, an interview technique was chosen for Phase 1 of the study because it ensured a face-to-face encounter with the six research participants. The purpose of this phase of data collection was to gain the perceptions of six facilitators who were directly involved in the delivery of the MDP and had direct contact with the officers who studied with the program.

Eliciting participants' perceptions and the way they made sense of their lives was the key focus of the first phase of data collection for this study. This purpose is consistent with the views held by Fraenkel and Wallen (1990) and Merriam (1988), and as Lincoln and Guba (1985) state, the goal was to understand multiple realities. In this study the semi-structured format was chosen so that possibilities could be explored regarding the information sought. In Phase 1 the researcher was the primary data-collecting instrument, an approach

supported by many influential theorists on qualitative research methodologies such as Eisner (1991), Fraenkel and Wallen, Lincoln and Guba, and Merriam.

The researcher gained permission from each research participant to record data electronically on audiotape. This was done to ensure information was not missed and the accuracy of the interview protocols could be checked. To engage the research participants at the outset of the interviews an introduction to the study was provided, and the process for the interview was explained. Research participants were made aware that a transcript of the interview would be provided for their confirmation and that all information would be treated with confidence. How the results of interviews would be incorporated into the study and how the information would be stored were also explained. All research participants were assured that their responses would be anonymous with regard to their perceptions.

To facilitate the development of an interview guide the researcher engaged in preliminary informal *learning conversations* with three facilitators of the MDP. These facilitators were directly involved in the delivery of the program but were not subsequently involved in the actual data collection for this study. While the learning conversations were not part of the formal research design for this study, the objective of the conversations was to learn from the perspectives of experienced facilitators, and to clarify issues for the researcher. Issues focussed on:

- the nature of police officers as distance education students;
- the attitude of police officers to undertaking continuing education and professional development that was mandatory if the officers sought promotion;
- the reasons why police officers terminated their enrolment in the program;
- the role of the educational provider in relation to an officer's termination of enrolment;
- the nature of learning support provided;
- the nature of the learning environment provided by the QPS;
- the factors that impacted on a police officer studying management;

- the external influences that impacted on an officer's potential to perform satisfactorily;
 and
- the support offered in workplaces by the QPS.

Using the information gained from the learning conversations, an interview schedule was prepared to ensure direction was given to the interview and that the content focussed on the critical issues of the study. Wiesma (1986) and Patton (1990) support the use of this approach because the comprehensiveness of the data could be enhanced. Further, the data collected was systematic for each participant. A copy of the interview schedule for Phase 1 has been included in Appendix A.

This interview schedule was used to conduct pilot interviews with three other facilitators involved in the delivery of the program. By conducting pilot interviews, the researcher ensured that the interview techniques employed were appropriate for this particular group of respondents. At the conclusion of each of the pilot interviews, the researcher engaged the respondent in conversation to ensure that the intended meaning of the questions was clear. By providing each respondent with comprehensive information relating to the context of the study, the facilitators were assisted to engage in the interviews effectively.

The same basic interview format used in the pilot was used in the actual study. Questions were introduced in logical progression and were asked completely and slowly. Clarification was provided where necessary. This approach was designed to enhance the validity of the results, and the importance of this aspect of interviewing has been emphasized by Taylor and Bogdan (1984). Fundamental principles of qualitative interviewing were followed. These included the building of rapport between the researcher and the respondents, ensuring that the respondents' perspectives were provided, allowing the respondents to use their own language and ensuring that the researcher and the respondents had equal status. The technique of careful listening as outlined by Howard and Peters (1990) was addressed by the researcher.

Advantages of using this semi-structured interviewing technique in this study were numerous, particularly with regard to gaining the participants' perspectives. As Marshall and Rossman (1999) note, large amounts of data could be obtained quickly. Participants used language that was natural for them and they were not required to understand and adapt to the concepts of the study. This was particularly important for those police officers who did not have specific tertiary qualifications. An environment of trust was established and this supported the collection of valuable data, which were then analysed and used as the foundation for the development of the questionnaire for Phase 2 of this study.

Marshall and Rossman (1999) note several disadvantages of using interviews including issues relating to the dependence on co-operation of participants, that there could be discomfort for the researcher, that the researcher must rely on the honesty of participants, and that interviews can be difficult to replicate. Such weaknesses were not considered a major issue for this study because of the generosity and professionalism of those interviewed. All interviewees were experienced facilitators within the MDP and supported the conduct of the research.

3.3.2.2 Phase 2 – Questionnaire. The objective for this phase of data collection was to assess officers' perceptions of the MDP because it was necessary to gain the perceptions of a large number of police officers located over a wide geographical area. A questionnaire was chosen as the most appropriate method available for the second phase of this study. There were several sound reasons for employing a questionnaire in Phase 2 of this study. Support in this context was drawn from Babbie (2004) who stated that the questionnaire was the best method available to collect data to describe a population too large to observe directly. Significant data were also able to be collected in a short space of time. Babbie also noted that the characteristics of those used in probability sampling can be used as a reflection of a larger population, and this was most appropriate for this study where a representative sample of police officers at varying ranks and from varying locations throughout Queensland were asked to complete the questionnaire. Further, because data were sought about self-reported beliefs and behaviours, the questionnaire was deemed most appropriate for this phase of data collection (Neuman, 2000).

Officers who had completed at least one unit of the MDP were asked to respond to a questionnaire that assessed the factors that affected their participation and performance when engaged in the program. As outlined in Chapter 4, five concept areas were derived from the analysis of data gained from the six semi-structured interviews conducted as Phase 1 of this study and formed the basis for the development of questionnaire items. These were:

- In-Service Professional Development
- Policing as a Profession
- MDP Success Potential
- Student Support
- Clinical Program Delivery

As outlined in Chapter 4 (Section 4.2.2.1), two additional concept areas were subsequently added. These were Officer-Staff Member Discourse and Emotional Support.

An Intuitive-Rational approach (Fraser, 1986) was employed in the development of the scales for this study. This involved the identification of important dimensions as outlined in Section 3.3.2.1, and item development and field-testing of the questionnaire (see Section 4.3.2). An explanation of this process follows. A pilot study of the questionnaire, as recommended by Baker (1994), was conducted and the sampling frame for this trial was 50 police officers, who had completed at least one unit of the MDP, selected at random. Importantly, the questionnaire was administered to officers of similar rank to those who would be asked to complete it in the main study. A total of 31 officers completed and returned questionnaires. Checks were made on internal consistency of scales and modifications were made by removing items that did not correlate with the remaining items in the scale. The wording of several questions was also changed to enhance clarity of an individual item or to improve the scale. Such changes have been documented in Chapter 4 (Section 4.3.2.2). Results from the pilot study supported the questionnaire's structure. Modifications resulted in a sound questionnaire and reflected characteristics outlined by Czaja and Blair (1996). That is, it was a valid measure of the factors of interest, it

convinced respondents to cooperate, and it elicited acceptably accurate information. A copy of the questionnaire for the pilot study has been included in Appendix C.

Items on the questionnaire represented factors surrounding the research phenomenon that were the focus of this study, particularly as they related to participation and performance of officers undertaking management education. A Likert scale response format was used for the questionnaire and, as McBurney (2001) advocates, respondents were asked to indicate their degree of agreement or disagreement for each questionnaire item. Responses to items on the questionnaire were measured on a 5-point scale with 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree and 5 = Strongly Agree. Each respondent was asked to circle the number that most closely corresponded with his or her opinion.

The first group of questions related to demographics, and the information sought related directly to Research Question 3, which considered the relationship between an officer's characteristics and the factors that influenced participation and performance in the MDP. The information sought included gender; age; dependent children; current rank (senior constable, sergeant, senior sergeant or commissioned officer); type of duty (uniform general duty, plain clothes, administration/managerial, or specialist; highest educational level attained (completed secondary school, technical and further education diploma, partially completed bachelor degree, completed Bachelor degree, postgraduate – partial or completed), and geographic location.

Attention was paid to ensuring each item related to the seven concepts; that the item was clear and unambiguous; that knowledge and information that an officer would not have was not included; and that personal information an officer may resist giving was not sought. In addition, careful consideration was given to each question to ensure that bias could be avoided. As far as possible items were written so that respondents would interpret a specific question the same way. Because the questionnaire was self-administered, it was important to ensure that clear and detailed instructions were included. The physical appearance and size of the questionnaire contributed to the clarity for officers when they completed it. Such attributes were supported by Fowler (1993).

Demographic items preceded the substantive items on the questionnaire. Questionnaires were mailed to respondents and a stamped, addressed envelope was provided for the return of the questionnaire to the researcher. Cost, availability of respondents and convenience were the three factors that provided the rationale for this data collection procedure.

A copy of the questionnaire used in the main study has been included in Appendix D.

3.3.2.3 *Phase 3 – Semi - structured Interviews*. Techniques as outlined for Phase 1 of this study were followed for the two interviews conducted with the manager of the MDP and the head of the School of Management. Questions were based on an analysis of the data from the questionnaire. Both the manager of the MDP and the head of the School of Management performed senior roles directly related to the delivery of the program. The manager had direct responsibility for the overall delivery of the program with responsibility for administration, human resource management, acquisition and maintenance of physical resources and finance. Within the School of Management, the head had responsibility for the daily activity of the school and for supervision of facilitators who had an academic role and staff who performed administrative functions. Both the manager and the head of the School of Management played key roles in strategic planning, the acquisition of human and physical resources and the delivery, monitoring and evaluation of the program. A copy of the interview schedule for Phase 3 is in Appendix E.

3.3.3 Samples

3.3.3.1 Samples for Phases 1 and 3 (Semi-Structured Interviews)

Facilitators of the MDP at the QPS Academy were either police officers who had undertaken the MDP, or civilians who were employed by the QPS because of their qualifications and expertise in the field of management and education. The sample for Phase 1 of this study consisted of three police officers and three civilians who were facilitators within the MDP. Permission was sought from, and granted by the Research and Evaluation Committee of the QPS to conduct all three phases of this research project.

As noted previously, Phase 3 of this study involved semi-structured interviews conducted with the manager of the MDP and the head of the School of Management at the QPS Academy. The manager of the MDP was a police officer at the rank of inspector and the head of the School of Management was a civilian. Research participants were interviewed at the QPS Academy.

3.3.3.2 Samples for Phase 2 (Questionnaire)

A total of 700 police officers who had completed at least one unit of the MDP were asked to complete the questionnaire. Sampling design for this population was single stage and the researcher was provided with the names and contact details in the population by the QPS, and could sample officers directly. A stratified random sample was selected wherein each individual in the sample had an equal probability of being selected. One in six officers whose names appeared on the database was selected to take part in this study. A total of 700 officers were chosen to complete the questionnaire because this number provided a sound representation of the total number of 4200 who had completed at least one unit of the MDP at the time of distribution of the questionnaire.

In total 475 officers completed and returned the questionnaire thus providing a return rate of 69%. This provided assurance that a sound sample of police officers throughout Queensland had been attained. Of the 475 officers who completed and returned the questionnaire 53 were female and 422 were male. Respondents were asked to indicate an age range and the ages of respondents were as follows: 21 – 30 (36), 31 – 40 (276), 41 – 50 (152) and 51 – 60 (11). Of the 475 officers who responded 342 had dependent children and 133 did not. At the time of completion of the questionnaire, 164 officers were at the rank of senior constable, 196 were at the rank of sergeant and 115 were at the rank of senior sergeant. With regard to type of duty performed, 193 performed uniform general duty, 73 were plain-clothes officers, 96 were engaged in administration or managerial duties and 113 performed specialist roles. In relation to highest educational level attained, 192 had completed secondary school, 79 had a TAFE diploma, 95 had a partially completed Bachelor-level degree, 61 had completed a Bachelor-level degree and 48 had either

completed or were engaged in a postgraduate qualification. Of the 475 respondents, four Queensland geographic groupings were determined as follows: Headquarters/Metropolitan North/Metropolitan South (130), North Coast/South Coast/South Eastern (193), Central (50) and Northern and Far Northern (102). As far as possible the sample was drawn to be representative of each category.

3.3.4 Data Analysis

3.3.4.1 Data Analysis for Phases 1 and 3 (Semi-Structured Interviews)

As indicated in Figure 3.1, there were three phases of data collection in total. The first and third phases were qualitative in nature and involved the conduct of semi-structured interviews. In the first phase, six interviews were conducted with facilitators of the program to seek their perceptions on:

- factors that encouraged officers to participate in the program;
- the benefits of undertaking the program for officers;
- the perception officers had of the program;
- the perception officers had of the personal and professional benefit to them of undertaking a program of management development;
- factors that discouraged students from participating in the program;
- distance education mode of delivery;
- the general attitude police officers had to continuing education and professional development;
- factors that may affect an officer's performance in the program;
- factors that may convince an officer to withdraw his or her enrolment;
- the nature of student support offered; and
- factors that were important from a clinical delivery perspective to support an officer's learning.

The interview schedule for the third phase of the data collection process focussed on: inservice professional development; policing as a profession; MDP success potential; student support; clinical program delivery; officer-staff member discourse and emotional support.

Data analysis from the first and third phases of the data collection process for this study followed the steps as recommended by Ary et al. (2002) for organizing the data, summarizing the data and interpreting the data. All interviews were transcribed fully to assist the process of analysis. A process of coding to determine the focus areas was employed based on the interview schedule and additional items that were raised by facilitators, the manager of the MDP and the head of the School of Management during the interviews. As Lincoln and Guba (1985) note the focus areas should provide a reasonable reconstruction of the collected data. Further, each of the areas should be distinct, and in this study the areas from the first phase led to the basis for the scales and dimensions of the questionnaire used in the second phase of data collection.

Data were summarized manually and familiarization gained through this process assisted with the interpretation of the data. The constant comparative method as outlined by Glaser and Strauss (1967) was employed. This process involved examining each topic to determine its characteristics and then comparing areas and grouping them with similar areas. If similar units of meaning did not exist, a new category was formed. Summarizing involved an examination of all areas and then merging these areas into patterns by finding links and connections among the areas (Ary et al., 2002).

Five areas were developed from the first phase of data collection and they became the dependent variables for the quantitative component of this study. They were In-service Professional Development; Policing as a Profession; MDP Success Potential; Student Support, and Clinical Program Delivery. Two additional scales, Officer-Staff Member Discourse and Emotional Support were incorporated into the instrument after a study of the Metacognitive Orientation Learning Environment Scale – Science (MOLES-S) (Thomas, 2002) (see Chapter 4). Results from these areas formed the basis for the semi-structured interviews conducted during the third phase of data collection for this study. For both

Phases 1 and 3 of this study consultation with colleagues confirmed the structure and content of the interview schedules.

3.3.4.2 Data Analysis for Phase 2 (Quantitative)

Research questions 3 and 4 were answered using quantitative data collected in Phase 2 of the study. These questions were:

Question 3: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP?

Question 4: Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?

Three important issues pertaining to the quantitative aspect of this study are addressed in this section. First, variables used in Phase 2 have been defined and their choice has been justified. Second, the units of analysis for the study have been stated. Third, procedures for analysing the quantitative data have been discussed.

This study focussed on the participation and performance of officers of the QPS who had completed at least one unit of the MDP. Dependent variables were the seven scales used in this study: In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support. Further details on these variables are provided in Chapter 4. The independent variables for the quantitative aspect of this study related to the characteristics of officers who had completed at least one unit of the MDP. They were gender; age; dependent children; current rank (senior constable, sergeant, senior sergeant or commissioned officer); type of duty (uniform general duty, plain clothes, administration/managerial, or specialist); highest educational level attained (completed

secondary school, technical and further education, partially completed bachelor degree, completed bachelor degree, postgraduate – partial or completed); and geographic location.

Gender was considered a significant independent variable for this study. The number of female police officers in the QPS is significantly lower than that of their male counterparts, and for this study a consideration of the issues that impacted on female as well as male officers was considered significant. Age was the second independent variable used for this study. It was believed important for this study to determine if younger officers had different attitudes to the dependent variables from older officers. Respondents were asked to indicate an age range from the following categories: 21 - 30; 31 - 40; 41 - 50 or 51 - 60. The issue of having responsibility for dependent children was considered a significant independent variable because of the impact caring for dependent children may have on an officer's ability to complete study in non-work time.

Current rank of an officer was included as an independent variable because this was considered a critical predictor variable. Respondents were asked to indicate their rank from those of senior constable, sergeant or senior sergeant. Also, respondents were asked to indicate the type of duty that best described their current activity from uniform general duty, plain clothes, administration/managerial or specialist. It was important to determine how officers engaged in different activities responded to undertaking the MDP in relation to the dependent variables. Information about the highest educational level attained was also sought. Respondents were asked to indicate from the following range of options: completed secondary school, technical and further education diploma, partially completed bachelor degree, or completed bachelor degree or postgraduate – partial or completed. This independent variable was considered significant with regard to all the dependent variables as it affected an officer's actual participation and performance in the program. Because the MDP was offered in the distance education mode, the geographic location of officers throughout Queensland was considered a crucial predictor variable. Officers were asked to indicate their geographic location from four groupings: Headquarters/Metropolitan North and South regions; North Coast/South Coast and South Eastern regions; Central region; and Northern and Far Northern regions.

The unit of analysis employed in the quantitative component of this study was the individual police officer (Neuman, 2000) with 475 individual officers of the QPS providing data through the completion of a questionnaire. Phase 2 data from this study were analysed through the use of a Multivariate Analysis of Variance (MANOVA). MANOVA was an appropriate technique for this part of the study because seven dependent variables were employed: In-service Professional Development; Policing as a Profession; MDP Success Potential; Student Support; Clinical Program Delivery; Officer-Staff Member Discourse and Emotional Support. In such circumstances, the use of MANOVA in preference to a series of ANOVAs for each dependent variable is desirable. Multivariate analysis of variance was employed to control Type 1 error, and to provide a multivariate analysis of effects by acknowledging the potential for correlations between the dependent measures. MANOVA can detect when there are differences between groups of a system of variables (Huberty & Morris, 1989, as cited in Weinfurt, 1995). By using MANOVA, differences caused by the independent variables may be shown.

To investigate the fourth research question of this study, (viz. Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?), a strategy with two distinct stages was implemented. This strategy employed Principal Components Factor Analysis (PCFA) using the Statistical Package for Social Science (SPSS) and Structural Equation Modelling (SEM) using LISREL 8.3 (Jöreskog & Sörbom, 1993). In the first stage, the factorial validity of each of the seven scales (viz. In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support) was explored using PCFA. For each scale, a PCFA was performed for that scale's items only. In addition to establishing the factorial validity of a particular scale, each of these analyses provided factor score coefficients to be used in generating composite scale scores from items. Using theory described by Holmes-Smith and Rowe (1994), these models maximized the reliability of composite scales and associated latent variables. (In structural equation modelling, latent variables are not measured directly. Their values are indicated by observed variables. For example, in the present study, the latent variable Student Support

was indicated by an observed composite variable computed from nine student support items.) According to Holmes-Smith and Rowe, the composite score reliability (e.g. Cronbach alpha) is maximized if the weight on each item (i.e. coefficient) is the corresponding factor score coefficient rather than unity.

The second stage of these analyses used these seven scales as variables in structural equation modelling. Specifically, the purpose of these analyses was to examine simultaneously the relationships among these seven variables and six of the seven grouping (or observed) variables in this study (viz. Gender, Age, Rank, Dependent Children, Highest Qualification, and Geographical Remoteness). Officer's Duty was not included as a grouping variable as it was not possible to establish a meaningful coding mechanism for police duties that would be applicable to the correlational data analyses of LISREL. One very useful feature of LISREL is that it is possible to compute polyserial correlations among grouping variables that have categorical data (for example Rank) and scales that have continuous data (for example Student Support). This contrasts with traditional correlational approaches, which compute Pearson correlation coefficients, which assume two continuous variables.

Munck (1979) showed that path loadings (λ) and error variances (θ) for observed variables can be fixed in structural equation modelling and that, provided correlation matrices are analysed, they are related to reliability (r) by the formulae

$$\lambda = \sqrt{r}$$
 and $\theta = 1 - r$.

These formulae allow for paths from observed composite variables to latent variables and error variances of observed composite variables to be fixed. Figure 3.2 illustrates this theory for the Student Support variable with the latent variable Student Support measured by the observed variable with a path loading λ and an error variance of θ as defined above. The advantage of this theory is that the number of parameters to be estimated by LISREL is sharply reduced with consequent improvement in model robustness.

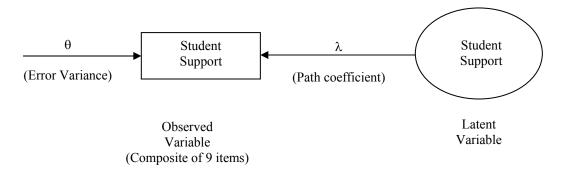


Figure 3.2 Measurement Model for Student Support

Of the many indices available to report model fit, model comparison and model parsimony in structural equation modelling, three indices are reported in this thesis: the Root Mean Square Error of Approximation (RMSEA), the Tucker-Lewis Index (TLI) and the Parsimony Normed Fit Index (PNFI). Whereas the RMSEA assess model fit, the TLI and PNFI assess model comparison and model parsimony respectively. To interpret these indices, the following rules which are generally accepted in the SEM literature as reflecting good models were adopted: RMSEA should be below .05 with perfect fit indicated by an index of zero, TLI should be above 0.90 with perfect fit indicated when TLI = 1.00, and PFNI should be above 0.50 with indices above 0.70 unlikely even in a very sound fitting model. Further discussion on indices and acceptable values is provided in Byrne (1998); Kelloway (1998); and Schumacker and Lomax (1996). While the use of χ^2 tests to report goodness of fit of the model to the data is acknowledged as problematic in SEM, it was used in this study to report improvements to the overall model fit as posthoc adjustments were made. The $\chi 2$ /df ratio where df refers to degrees of freedom was used as one indicator of model fit. A ratio of about 1.5 is usually associated with good fitting models. A final statistic reported in this study was the total coefficient of determination (Jöreskog & Sörbom, 1989) which is the amount of variance in the set of dependent variables explained by the set of independent variables. In addition to overall fit statistics, it is important to consider the strength and statistical significance of individual parameters in the model. Each path was tested using a t-test (p < .05). More specific information on the structural equation modelling conducted in the present study is provided in Chapter 6 (see Section 6.5).

This study focussed on the participation and performance of officers of the QPS who had completed at least one unit of the MDP. Dependent variables were In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support.

3.3.4.3 Research Period

The research reported in this thesis was conducted during 2001 and 2002. The key periods of the research are indicated below.

Phase 1: June - August 2001

A research schedule was developed and trialled for the semi-structured interviews that were conducted with six facilitators employed within the MDP.

Phase 2: January – November 2002

A questionnaire was developed based on the findings from Phase 1 of this study and was distributed to 50 officers in the pilot study. Results from this data analysis were used to refine the questionnaire prior to its distribution to 700 officers throughout Queensland in the main study. A total of 475 completed questionnaires were returned and the data were entered following the same process as for the pilot study.

Phase 3: November 2002 – March 2003

This phase of the data collection process involved interviews with the manager of the MDP and the head of the School of Management.

3.4 COMMENTS ON VALIDITY

This study focussed on a 3-phase research design, which embraced both qualitative and quantitative data collection methods. Reliability and validity are important in both quantitative and qualitative studies because they are fundamental to the truthfulness and credibility of findings as noted by Neuman (2000). Issues of internal and external validity

for both the qualitative and quantitative components of the study are considered in this section. Internal and external validity of design are crucial features of sound research design (Glass & Stanley, 1970) and as Neuman (2000) notes qualitative and quantitative styles view specifics of validity differently.

While internal validity may be defined as the "approximate validity with which we infer that a relationship between two variables is causal (Cook & Campbell, 1979, p.37), external validity refers to the generalizability or representativeness of the findings (Ary et al., 1996) and to how the findings can be generalized about populations or settings. While external and internal validity are both important, Campbell and Stanley (1963) note that in quantitative designs features that increase internal validity may reduce external validity. Extensive control of variables may assist internal validity, but for this study it was important that the findings had generalizability across all police officers at senior constable, sergeant and senior sergeant ranks who had completed at least one unit of the MDP. While an experiment that was internally valid may or may not be externally valid, an experiment that lacks internal validity cannot be externally valid. Because of this, internal validity was seen as the more important of the two forms of validity.

3.4.1 Qualitative Component – Internal Validity

According to Nation (1997) the internal validity of qualitative designs refers to how concepts and interpretations are similarly interpreted by researcher and respondent. Further McMillan and Schumacher (1993) believe that strategies such as lengthy data-collection periods, use of participants' language, and field-based research increase internal validity. While the importance of validity in qualitative research must be acknowledged, Neuman (2000) emphasizes the need for a fair portrayal of information provided by a respondent and that such portrayal of social life must be valid. Lincoln and Guba (1985) raise the issue of trustworthiness being achieved through a process of verification of data in qualitative research, and this was achieved through the verification of data by interviewees of the transcribed data.

For Phases 1 and 3 of data collection for this study, interviews were conducted in the field with those directly responsible for the delivery of the program. In the first phase of data collection, three facilitators were serving police officers and three were civilians who were employed because of their qualification in management and education as well as their expertise in the delivery of management education programs specifically in the distance education mode. In planning the interview schedule, the researcher used language that was appropriate for all facilitators to ensure that each facilitator clearly understood each question and could respond from his or her perspective. Because the interviews were taped and transcribed in full, the data available for analysis were true to the experiences of the facilitators who were interviewed, and adhered to the core principles of validity that as Neuman (2000) advocates is to be truthful.

Internal errors to the design of the study were minimized because of the researcher's familiarity with the delivery of the program. Questions incorporated in the semi-structured interview were trialled with three other facilitators involved with the delivery of the program to ensure they were clear and easy to understand.

3.4.2 Qualitative Component - External Validity

External validity in qualitative research refers to the generalizability of findings from one setting or group of people to a broad range of settings or groups of people (Neuman, 2000). External validity for the Phase 1 qualitative component of the study was considered sound because three facilitators involved in the delivery of the management units were consulted prior to the conduct of the interviews with the six facilitators who provided data for this study. The results applied only to the facilitators engaged in this specific program, as the aim of the study was not to gain data or results that applied to the delivery of management education programs in other contexts or educational institutions.

3.4.3 Quantitative Component - Internal Validity

Campbell and Stanley (1963) note eight possible threats to internal validity: history, maturation, statistical regression, testing, selection – maturation interaction, differential

selection, instrumentation and subject attrition. These threats are briefly discussed as they relate to this study.

History, Maturation, Statistical Regression, Testing, Selection-Maturation Interaction. Data for the quantitative component of this study were collected in February 2002 for the pilot study and in October and November 2002 for the main study. Because the data collected from the pilot study were not included in the main study, these five threats to internal validity were not relevant to the present study.

Differential Selection. Officers selected to take part in the quantitative component of this study were drawn from the MDP database of the QPS. As discussed previously, the goal was to ensure a sample was selected wherein each officer who appeared on the MDP database had an equal probability of being selected. One in six officers whose names appeared on the database was selected to take part in this study.

Instrumentation. A significant part of this research program was the development of the questionnaire. Chapter 4 of this thesis details the strategies employed for instrument validation. As standard guidelines for scale development were followed in the development of the questionnaire, the threat to internal validity due to instrumentation deficiencies was minimised.

Subject Attrition. All questionnaires were completed on a single occasion so there was not any subject attrition threat. Instructions provided were clear and easy to follow, as was the presentation of the questionnaire. An inspection of each returned questionnaire revealed that no subjects failed to complete the questionnaire fully.

3.4.4 Quantitative Component - External Validity

Campbell and Stanley (1963) note that external validity is threatened by the lack of representativeness of the available and target population, failure to describe independent variables explicitly, Hawthorne effects, inadequate operationalising and dependent

variables and pretest sensitization. This section will consider threats to the external validity of the research design of the quantitative section of this study.

Lack of Representativeness of Available and Target Populations. This was not a threat to this aspect of the study because the 700 officers who were invited to complete the questionnaire were drawn from the ranks of senior constable, sergeant, and senior sergeant of the QPS and a random sample was drawn.

Failure to Describe Independent Variables Explicitly. This section of the study had seven independent variables: gender; age; dependent children; current rank (senior constable, sergeant, senior sergeant or commissioned officer); type of duty (uniform general duty, plain clothes, administration/managerial, or specialist); highest educational level attained (completed secondary school, technical and further education diploma, partially completed bachelor degree, completed bachelor degree, postgraduate – partial or completed); and geographic location. Each independent variable had a clear meaning and the quantitative component of this study could be replicated easily. Failure to describe independent variables explicitly could not be considered a serious threat to the validity of this study.

Hawthorne Effect. As Neuman (2000) notes, the Hawthorne effect relates to any effect caused by the attention of a researcher. This was not seen as a major threat to this study. Such effects were minimised by the reassurance provided by the researcher to interviewees that the data collected was for research purposes only and was strictly confidential to the researcher. For Phase 2 anonymity of the respondents was assured.

Inadequate Operationalising of Dependent Variables. The dependent variables for this study were: In-service Professional Development; Policing as a Profession; MDP Success Potential; Student Support; Clinical Program Delivery; Officer-Staff Member Discourse and Emotional Support. These scales were developed using Phase 1 data and a review of relevant literature on distance education and learning environments. Additionally, Chapter 4 of this thesis documents the validation of these scales using standard psychometric procedures for instrument design. These variables were adequately operationalised.

Pretest Sensitisation. The pretest, as noted by Neuman (2000, p. 228) is the "measurement of the dependent variables prior to the introduction of the treatment", and it may be possible for the test itself to impact on and influence results of the main study. The questionnaire was administered on one occasion only. Accordingly, pretest sensitization was not considered a threat to the research design of this study. It is also noteworthy that the 31 officers who participated as part of the pilot study of the questionnaire were not involved in the main study.

3.5 CONCLUSION

This chapter provides a detailed discussion of the research methods employed in this study. Both qualitative and quantitative research methods were employed to collect data to answer the research questions as stated in Section 3.1. The justification for combining qualitative and quantitative collection methods is provided. The concept of triangulation as it relates to this study is explained.

Phase 1 of the research process had a qualitative focus and was based on the conduct of semi-structured interviews with six facilitators of the MDP who were responsible for delivery of the distance education program. Details are provided about the learning conversations that were used to develop the interview schedule, and the pilot interviews that were conducted prior to the specific interviews that provided the data for this study. Theoretical considerations for the use of semi-structured interviews are provided. How data from this phase were used to inform the second phase of data collection is explained.

Phase 2 of the data collection process was quantitative in nature and involved a questionnaire distributed to, and completed by, officers at the rank of senior constable, sergeant and senior sergeant who were geographically located throughout Queensland. Justification for the use of a questionnaire for this phase is provided, as is the process for the development of the questionnaire. Theoretical considerations about the development and implementation of the questionnaire are provided. The use of MANOVA to analyse data is also justified. How outcomes from Phase 2 of data collection were used to inform

Phase 3 are also explained. Details are provided about the strategy employed to investigate Research Question 4 that employed PCFA using the SPSS and SEM using LISREL 8.3 (Jöreskog & Sörbom, 1993).

The third phase of the data collection process was based on a qualitative approach and involved semi-structured interviews with the manager of the MDP and the head of the School of Management. The interview schedule for this component of the study was drawn from the results of the questionnaire in Phase 2.

Because of the uniqueness of this study, instruments for each phase of the data collection process were developed specifically to answer the research questions posed. Both qualitative and quantitative techniques were employed because each technique was deemed most appropriate for the specific nature of the data sought in each of the respective phases. The development and validation of the questionnaire for Phase 2 of this study was a crucial part of this research. This important issue is documented in the following chapter.

CHAPTER 4

DEVELOPMENT OF INTERVIEW SCHEDULES AND VALIDATION OF QUESTIONNAIRE

4.1 INTRODUCTION

This chapter reports the development and validation of the interview schedules employed in Phases 1 and 3, and the questionnaire employed in Phase 2 of this study. Phase 1 consisted of six semi-structured interviews with facilitators who were employed within the MDP. Roles of the six facilitators centred on curriculum development, preparation of assessment items, liaison with officers enrolled in the program for the provision of learning support on an individual basis, the preparation of updates that were designed to assist officers to complete assessment items and were distributed by email throughout the semester, and the marking and moderation of assessment items. Three of the facilitators interviewed were police officers and three were staff members who were employed by the QPS to perform an academic role. Data collected from the six semi-structured interviews formed the basis of the scales that were developed for distribution as a questionnaire in Phase 2.

Phase 2 of the data collection process involved the distribution of a questionnaire to 700 officers of the QPS. All officers to whom the questionnaire was distributed had completed at least one unit of the MDP, and were geographically located throughout Queensland. Phase 3 of the data collection process was based on an analysis of the data collected from the completed questionnaires and consisted of semi-structured interviews with the manager of the MDP and the head of the School of Management. The remaining sections of this chapter address the theoretical perspectives underpinning the interview schedules and quantitative validation (Section 4.2).

4.2 THEORETICAL PERSPECTIVES ON THE DEVELOPMENT OF INTERVIEW SCHEDULES AND QUESTIONNAIRE

This section discusses the interview schedule development criteria for Phases 1 and 3 of this study, and the instrument development and validation procedure for Phase 2 based on the factors that affected the participation and performance of QPS officers who undertook the MDP by distance education. Each of the three phases of data collection has been addressed individually.

4.2.1 Interview Schedule for Phase 1

Cresswell (1994) outlined three data collection steps in qualitative research. The first was setting the boundaries for the study, the second was collecting information through observations, interviews, documents or visual materials and the third was establishing the protocol for recording information. Interviews formed the data collection method for Phase 1 of the study. Inherent in the protocol were the key questions to be asked, and if appropriate, the probes to follow the key questions. Of relevance to this section of the current study was the protocol involving the development of the interview schedule.

The objective in the preparation of the interview schedule was to prepare open-ended descriptive questions based on the topics and issues to be covered (Hughes, 1993). According to Hughes, interview schedules increase the comprehensiveness of the data collected. Such a schedule also ensured that there was a systematic approach to the data collected from each participant. A negative aspect, according to Hughes was that important or salient aspects might be omitted. This effect was minimized for this study because of the comprehensiveness of the schedule. Such a schedule assists with the conduct of interviews in a manner that is successful in gaining the perspectives of participants and, as McDaniel and Gates (1999) note, assists with face-to-face interviews by supporting the interviewer to elicit detailed information from respondents. This was the goal for this phase of data collection.

Researchers such as Cresswell (1994), Taylor and Bogdan (1984), Hughes (1993), and Neumann (2000) recommend the preparation of an interview schedule when conducting interviews for research purposes. Taylor and Bogdan recommended listing the general ideas to be covered with each participant, but believed that how to phrase the questions remained with the researcher. The researcher should also decide the sequence of questions to be asked (Hughes). To prepare an interview guide, the researcher must have knowledge about the people or situation to be studied. To achieve this requirement and to complement the researcher's knowledge, learning conversations, as outlined in Chapter 3 were held with three facilitators of the MDP. The researcher had a limited supervisory role with the MDP and the facilitators who had agreed to be interviewed, and this association assisted with the construction of the interview schedule. Three pilot interviews were conducted with facilitators of the MDP to test the effectiveness of the interview schedule. Interviews conducted during the first phase of data collection provided a basis for addressing all Research Questions.

4.2.2 Questionnaire Development for Phase 2

Data collection for Phase 2 of this study centred on the completion of a questionnaire that was distributed to 700 officers of the QPS. This section considers the basis for questionnaire development, the construction of the questionnaire and the process of building scales.

De Vaus (1986) emphasised the importance of linking the concepts used for scale development to the overall research plan. Concepts must be defined and then indicators developed. For this study the concepts were derived from the interviews conducted with six facilitators of the MDP and were based on factors that affected the participation and performance of officers enrolled in the program. Such data were the perceptions of facilitators and their role in the development, delivery, assessment, evaluation and provision of student support for the program.

De Vaus (1986) listed three steps in conceptual clarification. First, a definition based on the common elements of the definition has to be developed. Second, it is necessary to justify its use. This provides the focus for the nature of information to be collected. The third step involves delineating the dimensions of the concept because many concepts may have a number of different aspects or dimensions. De Vaus stresses the importance of distinguishing between dimensions to ensure that the dimensions developed relate directly to the research topic.

4.2.2.1 *Principles of Scale Development*. Researchers such as Neuman (2000), Burns (2000) and De Vaus (1986) all support similar principles for scale development. Neuman (p.180) states "scales show the fit between a set of indicators and a single construct" and as De Vaus notes multiple indicators should be used to measure a concept in scale development. Two approaches to the development of scales are intuitive-rational and factor analytic (Fraser, 1986). As noted in Chapter 3 of this study, an intuitive-rational approach was used and involved three basic steps. The first step was the identification of the salient constructs that were achieved through the interviews conducted during Phase 1 of the data collection process for this study. The second step was item identification and the third step was field testing of the questionnaire. Advantages of using multiple indicators included enhanced understanding of the complexity of a concept and the development of more valid measures. If a number of questions are used and one question is poorly worded, the scale can be refined with subsequent improvement in scale reliability. The fundamental advantage of using valid scales is that the analysis of data can be simplified by summarizing the information conveyed by a number of questions into one variable. Oppenheim (1993), Burns and De Vaus all recommended pilot testing indicators as a way of eliminating unnecessary questions. Further, the number of items in the questionnaire was determined by considerations such as the overall length of the questionnaire and how the questionnaire was to be administered.

Once the initial questions have been developed, each question must be evaluated before the composition of the final questionnaire can be determined. De Vaus (1986) suggests the

following checks should be made once the pilot study has been constructed. A check should be made on the ability of an item to discriminate, that is, to determine if most respondents provide the same answer, or if the data will reveal variations in answers to be explained. A second check must ensure that specific items actually form a scale, and that all items belong to the scale for which they were designed.

The reliability and validity of items should be determined and inappropriate items should be removed. Three features are relevant to a check for redundancy. If two questions closely measure the same aspect, one question should be removed. Redundant items can be located by computing correlations between items, and if two items address the same concept and correlate over 0.8 then one of the items should be removed. A check for a response set should also be made. Questions should be alternated so respondents do not develop a pattern, such as agreeing with all items on a Likert scale. This is known as an acquiescent response set (De Vaus, 1986).

Further, De Vaus (1986) noted that the validity of a measure depended on how a researcher defined the concept it was designed to measure. Three important types of validity are criterion validity, content validity and construct validity. Of relevance to this study was content validity because it emphasises the extent to which the indicators measure the different aspects of the concept and construct validity because it refers to the extent to which a test may be said to measure that which it has been designed to measure.

A reliable instrument is one where the same results are gained on repeated occasions. According to De Vaus (1986), poor wording of questionnaire items may result in unreliability. Further, the best method for measuring the reliability of scales is to have a set of questions to measure the one concept.

4.2.2.2 *Principles of Questionnaire Construction*. The following aspects about wording of questionnaire items have been noted by Czaja and Blair (1996), Oppenheim (1993), Babbie (1990), Neuman (2000), Burns (2000), and De Vaus (1986), and are fundamental to sound wording of questionnaire items:

- Simple language should be used;
- Items should not be "double-barrelled" in that they have two distinguishable questions embedded in the item;
- Items should not be leading;
- Respondents should have the necessary knowledge to answer the question;
- The words used should have the same meaning for all respondents;
- Questions should not be ambiguous;
- Questions should not artificially create opinions; and
- The frame of reference for each question should be clear.

The Likert-style format that was employed for this phase of data collection required respondents to indicate their agreement or disagreement with a particular statement.

Burns (2000) stresses that the appearance and arrangement of a questionnaire is vital to a successful study and that a well-planned and carefully constructed questionnaire will increase the response rate. With regard to instructions for respondents, Czaja and Blair (1996) note that the purpose of the study must also be communicated, and the importance of the study must be made clear to potential respondents. An assurance of confidentiality must be provided together with information as to how and when the questionnaire should be returned. Information about how to complete the questionnaire should be provided. Finally, the questionnaire should not appear cluttered, and printing should appear on one side of a sheet of paper only. These aspects were employed in the present study. Burns recommends a pilot or trial of the questionnaire with individuals as similar as possible to those who will complete the questionnaire in the main study. In pilot studies Oppenheim (1993) recommends a process of analysing each question, and that response frequencies from the pilot should be used to eliminate or rephrase questions that produce undesirable response distribution. The questionnaire should then be amended for the main study. This process was followed in this study.

4.2.3 Interview Schedule for Phase 3

The Phase 3 interviews employed a similar approach to the Phase 1 interviews. The interview schedule for Phase 3, however, was drawn directly from an analysis of the data gained through Phase 2 (the questionnaire component of this study).

Data collected during Phase 3 of this study related directly to Research Question 5, which considered the implications of this study for enhancing MDP delivery. The manager of the MDP and the head of the School of Management were interviewed during Phase 3 of data collection because officers filling these two roles were in a position to implement desired changes, to liaise with senior members of the service or to seek funding for changes that would enhance delivery to officers enrolled in the program.

4.3 DEVELOPMENT AND VALIDATION OF INTERVIEW SCHEDULES AND QUESTIONNAIRE

4.3.1 Development and Validation of Semi-structured Interview Schedule: Phase 1

This section of the thesis addresses development and validation of the semi-structured interview schedule that was used to collect data for Phase 1 of this study. The objective of Phase 1 was to conduct interviews with six facilitators who were directly involved in the delivery of the MDP, and from an analysis of the data, determine the concepts that would form the basis of the scales and dimensions that were incorporated in the questionnaire that formed the basis for data collection for Phase 2 of the study.

The process as outlined by Hughes (1993) was followed for this study and involved openended questions based on the topics and issues to be covered. As outlined in Chapter 3 of this thesis, before each question could be developed, the researcher engaged in learning conversations with three facilitators of the MDP who were not subsequently involved in the actual data collection interviews for this study. While the researcher was directly involved with the MDP, this process was implemented to maximize the researcher's knowledge about the police officers who were the subjects of this study, and to ensure the interview schedule that was developed was as valid as possible. The objective of such conversations was to learn from the perspectives of experienced facilitators, and to clarify issues for the researcher.

Such issues focussed on:

- the nature of police officers as distance education students;
- the attitude of police officers to undertaking continuing education and professional development that was mandatory if the officers sought promotion;
- the reasons why police officers terminated their enrolment in the program;
- the role of the educational provider in relation to an officer's termination of enrolment;
- the nature of learning support provided;
- the nature of the learning environment provided by the QPS;
- the factors that impacted on a police officer studying management;
- the external influences that impacted on an officer's potential to perform satisfactorily; and
- the support offered in workplaces by the QPS.

As a result of the three learning conversations, five general areas were developed for the pilot interviews and subsequent interviews that were used to gain the data for this study. These five areas were:

- *Area 1*: Factors that encourage officers to participate in the MDP.
- Area 2: Factors that discourage officers from participating in the MDP.
- Area 3: Factors that might affect an officer's performance in the MDP.
- Area 4: Reasons an officer might terminate his/her enrolment within the MDP.

Area 5: Factors that must be addressed with regard to providing support for officers enrolled in the MDP.

The schedule that was developed ensured there was a systematic approach to the data collected from each of the six participants who provided data for this phase of the data collection process. This practice ensured that the perceptions that had been gained through this process by the researcher were valid and appropriate.

To enhance the quality of the interview data, the researcher used probing techniques as required to elicit responses to questions from each participant. Because of the researcher's background in educational environments, the language employed in the interviews with civilian staff members who had similar background experiences was different from that used with the police officers who did not share this similar educational background.

4.3.2 Development and Validation of Questionnaire: Phase 2

For the second phase of data collection for this study, a questionnaire was designed based on the concepts gained from the six semi-structured interviews conducted for Phase 1 of the data collection process for this study.

In accordance with Oppenheim (1993) and Burns (2000) the concepts were linked to the overall research plan and objectives of the study. The development of items based on the concepts, as outlined by De Vaus (1986) followed a process of developing a description based on the elements of the description and justifying its use, and delineating the dimensions of the concept.

In-service Professional Development was chosen as a concept because it was important to measure the attitude officers had to undertaking continuing education and professional development, and the importance of continuing education and professional development from an organizational perspective. Policing as a Profession was identified because of the

importance of officers accepting the notion of professionalism and accommodating to the MDP's role in achieving excellence through service delivery. An analysis of data confirmed that an officer's potential for success could be related to an officer's academic skill-levels on entry to the program, personal characteristics, behaviour of officers and factors related to delivery of the MDP thus supporting the area of MDP Success Potential. Student Support was identified because of the importance of the level of support offered to an officer to assist him or her to achieve success in the MDP and Clinical Program Delivery was identified because it was linked to the philosophy that supported the program from an organizational perspective and related to such aspects as the mode of delivery, relevance of content, how learning materials were organized and the relevance of assessment methods.

Items were relevant to the key concepts and were measured with several questions. For the pilot study, initially 8 items were included in the scale In-service Professional Development, 8 items were included in Policing as a Profession, and 11 items were included in MDP Success Potential. The scale Student Support had 11 items, and 12 items were included in the scale Clinical Program Delivery. Descriptive information about these five scales has been included in Table 4.1.

TABLE 4.1 DESCRIPTIVE INFORMATION FOR FIVE SCALES INFLUENCING PARTICIPATION AND PERFORMANCE OF POLICE OFFICERS IN THE MDP (PILOT STUDY)

Scale Name	Description	Number of Items
In-service Professional Development (IPD)	The extent to which an officer acknowledges the need for the planned acquisition of knowledge, experience and skills and the development of personal qualities necessary for the execution of	8
Policing as a Profession	professional and technical duties throughout a police officer's life. The extent to which an officer perceives policing as a profession.	8
(PP) MDP Success Potential (MSP)	The extent to which an officer has been prepared to, and is willing to study at the level required.	11
Student Support (SS)	The extent to which an officer needs support from the program and senior officers to be successful.	11
Clinical Program Delivery (CPD)	The extent to which the mode of delivery and the nature of the program supports the participation and performance of officers.	12

4.3.2.1 *Pilot Study*. A total of 50 questionnaire items were included in the pilot study. For this pilot study 50 officers who had completed at least one unit of the MDP were asked to assist by responding to the 50-item pilot questionnaire. The objective of this pilot study was to study the psychometric structure of the scales. Data from the 31 returned questionnaires were analysed using standard scale validation procedures, for example, internal consistency reliability. Because there were 50 items, given the case:item ratio was 31:50, it was considered inappropriate to conduct factor analysis.

Table 4.2 shows validation data for the five scales of the questionnaire used for the pilot study. Each scale had a satisfactory range of scores. For example, Clinical Program Delivery scale scores ranged from 28 to 50. One essential characteristic of a sound scale is that it has acceptable internal consistency reliability, that is, the set of items forming the scale have at least moderate intercorrelations. Cronbach's coefficient alpha was used as a convenient index of internal consistency. These values ranged from .28 for MDP Success Potential to .69 for In-service Professional Development. Of these five tentative scales, Inservice Professional Development and Student Support had acceptable internal consistency reliability. Both MDP Success Potential and Clinical Program Delivery had unacceptably low internal consistency reliabilities (.28 and .34 respectively).

TABLE 4.2 VALIDATION DATA FOR FIVE SCALES INFLUENCING PARTICIPATION AND PERFORMANCE OF POLICE OFFICERS IN THE MDP (PILOT STUDY)

Scale	Mean	Standard Deviation	Range of Scores		Cronbach	Mean
			Minimum	Maximum	alpha	Correlation
In-service Professional Development (IPD)	23.19	4.68	22	32	.69	.17
Policing as a Profession (PP)	27.42	3.74	22	30	.56	.16
MDP Success Potential (MSD)	38.19	3.52	28	43	.28	.25
Student Support (SS)	38.61	5.05	29	41	.67	.17
Clinical Program Delivery (CPD)	38.77	3.81	28	50	.34	.07

Another desirable characteristic of a battery of scales is that each scale assesses a distinct

construct, that is, the scales have acceptable discriminant validity. To estimate the

discriminant validity of the tentative scales, the mean correlation was computed by

averaging the simple Pearson correlation between each scale and the remaining four scales

in the pilot questionnaire. For all five scales, these values were low, thus indicating

minimal overlap among the scales. While psychometrically acceptable, these discriminant

validity indices reflected the poor internal consistency reliability of the MDP Success

Potential and Clinical Program Delivery scales.

4.3.2.2 Refinement of Questionnaire based on Pilot Study. On the basis of the above

data analyses, changes were made in order to improve the psychometric qualities of the

questionnaire, prior to its distribution to 700 officers of the QPS for completion as part of

the main study for Phase 2 of data collection for this study. The following tables relate to

the 5 scales included in the pilot study, together with a description of the scale and an

indication of the total number of items included in each scale.

Based on a review of the data shown in Table 4.2, the following changes were made to the

questionnaire. Information is also provided in these tables about the revised item numbers,

which appear in the questionnaire in the main study for Phase 2 of data collection for this

thesis.

TABLE 4.3 REFINEMENT DECISIONS FOR IN-SERVICE PROFESSIONAL DEVELOPMENT (IPD)

SCALE

Scale: In-service Professional Development

Item Numbers: 1, 2, 9, 16, 23, 30, 37, 44

Items Removed: 16, 44

Changes: Item 23 to read "Study of management education is important for a police officer who is

preparing to be, or is a manager."

Item 30: Negative wording has been changed to positive.

Item Numbers in Main Study: 1, 2, 9, 10, 16, 17, 28, 38

92

Table 4.3 shows refinement decisions for the IPD scale. Items 16 and 44 were removed because they did not contribute satisfactorily to the internal consistency reliability of the IPD scale. To improve the face validity of Item 23, the wording was modified from "MDP material is relevant for a police officer who is preparing to be, or is, a manager." to "Study of management education is important for a police officer who is preparing to be, or is a manager." In addition, Item 30 was changed from "I do not believe that by completing management education I can be a better manager." to "I believe that by completing MDP I can be a better manager." to provide positive wording.

TABLE 4.4 REFINEMENT DECISIONS FOR POLICING AS A PROFESSION (PP) SCALE

Scale: Policing as a Profession

Item Numbers: 3, 10, 11, 17, 24, 31, 38, 45

Items Removed: 11, 31, 45

Changes: Item 11 was deleted and substituted with "Management education for officers is important if the QPS is to improve as an organization."

Item 17 was changed to "QPS has helped me to understand the need for continuing professional development such as MDP."

Item 38 was changed to "Education of officers is essential if QPS is to improve its service level."

Item Numbers in Main Study: 3, 11, 18, 23, 29, 34, 39

Table 4.4 shows refinement decisions for the PP scale. Items 31 and 45 were removed to enhance the internal consistency reliability of the PP scale. Item 11 which stated "Management education for officers is important if QPS is to achieve the goals of the Strategic Plan." was replaced with "Management education for officers is important if the QPS is to improve as an organization." because the organizational focus was considered to have more relevance to officers in both operational and administrative roles. The wording of Item 38 was changed from "Education and training of officers is essential if QPS is to improve its service level." to "Education of officers is essential if QPS is to improve its service level." The reference to *training* was not considered appropriate for postgraduate study in management. Item 17 was changed from "QPS has helped me to understand the need for continuous professional development." to "QPS has helped me to understand the need for continuing professional development such as MDP." to ensure respondents aligned the item with the MDP when considering their response.

TABLE 4.5 REFINEMENT DECISIONS FOR MDP SUCCESS POTENTIAL (MSP) SCALE

Scale: MDP Success Potential

Item Numbers: 4, 12, 18, 19, 25, 26, 32, 33, 39, 40, 46

Items Removed: 12, 19, 26, 39, 46

Changes: Item 18 was replaced with "I know how to plan an assignment for MDP."

Item 25 was changed to "I would study more if I had more time."

Item 30 was changed to "I would attend an assignment-writing workshop for MDP in my workplace."

Item 32 was changed to "I organize my time to allow for study of MDP."

Item 40 was changed to "I would attend an orientation program for MDP in my workplace."

Item Numbers in Main Study: 4, 24, 30, 35, 40, 43, 45

Table 4.5 shows refinement decisions for the MDP Success Potential scale. Items 12, 19, 26, 39 and 46 were removed because they did not contribute satisfactorily to the internal consistency reliability of this scale. Item 18 was changed from "I understand how much effort is required to plan an assignment." to "I know how to plan an assignment for MDP." because the changed wording was aligned more effectively with the action required. Item 25 was changed from "I would not put in more effort with study if I had more time." to "I would study more if I had more time." to delete the negative emphasis. Item 30 was changed from "I would attend Assignment-Writing Workshops in the workplace if they were offered." to "I would attend an assignment-writing workshop for MDP in my workplace." to align the item with the MDP and the officer's individual workplace. The wording of item 32 was changed from "Sound time management skills are important for success in study." to "I organize my time to allow for study of MDP." to focus attention directly on the officer's association with the MDP. Item 40 was changed from "I would attend an orientation program for MDP in my workplace if it were offered." to "I would attend an orientation program for MDP in my workplace." because the phrase "if it were offered" did not contribute to the meaning of the item.

TABLE 4.6 REFINEMENT DECISIONS FOR STUDENT SUPPORT (SS) SCALE

Scale: Student Support

Item Numbers: 5, 6, 13, 14, 20, 21, 27, 34, 41, 47, 48

Items Removed: 6, 14, 34, 41, 47, 48

Changes: Item 5 was changed to "MDP staff members have a positive attitude to providing assistance."

Item 20 was changed to "The feedback I received on assignments assisted my learning about

management."

Item Numbers in Main Study: 5, 6, 12, 13, 19, 20, 25, 31, 41

Refinement decisions for the scale Student Support are provided in Table 4.6. Items 6, 13, 34, 41, 47 and 48 were removed because they did not contribute satisfactorily to internal consistency validity of this scale. The wording of Item 5 was changed from "Facilitators I have spoken with have a positive attitude to providing assistance." to "MDP staff members have a positive attitude to providing assistance." to align the item directly with the delivery of the MDP. Item 20 related to assignment feedback and was changed from "The feedback I received on assignments assisted my learning in management." to "The feedback I received on assignments assisted my learning about management." because the word "about" more directly related to the officer's learning activity.

TABLE 4.7 REFINEMENT DECISIONS FOR CLINICAL PROGRAM DELIVERY (CPD) SCALE

Scale: Clinical Program Delivery

Item Numbers: 7, 8, 15, 22, 28, 29, 35, 36, 42, 43, 49, 50

Items Removed: 7, 8, 15, 35, 36, 50

Changes: Item 22 was changed from negative to positive wording.

Item 42 was changed to "I enjoy learning in the distance education mode."

Item 43 was changed to "MDP assessment items tested my understanding of the material provided."

Item 49 was changed to "Distance education for me is a convenient way to study."

Item Numbers in Main Study: 7, 14, 21, 44, 46, 47

Refinement decisions for the Clinical Program Delivery scale are provided in Table 4.7. Items 7, 8, 15, 35, 36 and 50 were removed because they did not contribute satisfactorily to the internal consistency validity of the CPD scale. The wording of Item 22 was changed from negative to positive to read "I would benefit from visits by facilitators to my workplace." to assist officer understanding when responding to this item. Item 42 was changed from "Distance education for me is not a good way to study." to "I enjoy learning in the distance education mode." because the perception of each officer about this mode of study was sought. Item 43 was adjusted from "MDP assessment items are not relevant to police officers." to "MDP assessment items tested my understanding of the material provided." The previous wording was not clear and did not have direct relevance to the use of assessment items within the program. Item 49 was modified from "Distance education mode of learning suits me because it is flexible." to "Distance education for me is a convenient way to study." While the meaning remained intact, the item was less ambiguous.

Issues about the importance of effective student-teacher interaction were highlighted in Chapter 2 (section 2.2.3.3) of this thesis, and are fundamental to enhancing learner outcomes including development of metacognition skills. Of particular significance for this study was the contribution of Delling (1996) who emphasised the importance of feedback and two-way communication between learner and facilitator. The importance of learner support was highlighted in Moore's (1990) contribution and also by Wedemeyer (1968). Baath (1979) emphasised the importance of two-way communication between learner and facilitator in the distance education mode as did Holmberg (1999). Simonson et al.'s (1999) Equivalency Theory also addressed the importance of learner-facilitator discourse and support for the learner. Emotional support is an inherent part of learner support for those studying in the distance education mode and was also considered significant for positive learner outcomes. This need for positive affective learning experiences was emphasised by Hunt (1987) and McLoughlin (2002). Waghid (1998) believed in the value of dialogue between learner and facilitator as did Anderson and Garrison (1995).

To acknowledge the importance of enhancing learner metacognition through leaner-facilitator discourse and emotional support for learners in this study, consideration was given to The Metacognitive Orientation Learning Environment Scale – Science (MOLES – S) (Thomas, 2002) which addresses these two aspects. MOLES - S was developed to evaluate the metacognitive orientation of science classroom learning environments, or the extent to which the classroom environment supports the development and enhancement of students' metacognition (Thomas). Two scales, the Officer-Staff Member Discourse (OSMD) and Emotional Support (ES) were subsequently developed from the relevant MOLES – S scale.

Data obtained from police officers about both Officer-Staff Member Discourse and Emotional Support were considered meaningful for this study that sought the key factors that influenced participation and performance by officers of the QPS who undertook a management development program by distance education. Further, it was believed that data gained from the use of these two additional scales could assist with Research Question 5 as outlined in Chapter 3 (Figure 3.1) which related to the implications of the study for enhancing the delivery of the MDP.

Thus, the final form of the questionnaire for use in the main study consisted of 47 items with seven scales whose descriptions and classifications are given in Table 4.8. Responses were recorded using a five point format: 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree and 5 = Strongly Agree. A copy of this questionnaire with scale allocations is shown in Appendix D.

Five questionnaire items for the scales Officer-Staff Member Discourse and Emotional Support as outlined in Table 4.8 were added:

TABLE 4.8 TWO ADDITIONAL SCALES ADAPTED FROM THE METACOGNITIVE ORIENTATION

LEARNING ENVIRONMENT SCALE - SCIENCE (MOLES-S)

Scale	Scale Description	Questionnaire Items
Officer-Staff	The extent to which officers	Officers are encouraged to discuss how they learn
Member	feel they can engage with	about management.
Discourse	staff members of the	Officers are able to discuss with a facilitator how
(OSMD)	program in relation to their	they think when they learn about management.
	learning.	Officers can discuss different ways of learning
		about management.
		Officers can discuss with facilitators how well they
		are learning about management.
		Officers can discuss with facilitators how they can
		improve their learning about management.
Emotional	The extent to which officers	Within MDP, officers are treated fairly.
Support (ES)	feel supported in their	Within MDP, officers' efforts are valued.
	learning about management.	Within MDP, officers' ideas are respected.
		Within MDP, officers' individual differences are
		respected.
		Within MDP, officers' suggestions are appreciated.

4.3.2.3 Main Study. Table 4.9 provides information about the seven scales of the questionnaire used to collect data for Phase 2 of this study. As well as the total number of items used for each scale, a sample questionnaire item is provided. Thus, the final form of the questionnaire for use in the main study consisted of 47 items assigned to seven scales whose descriptions are given in Table 4.9. Responses were recorded using a five point format: 1 = Strongly Disagree; 2 = Disagree; 3 = Undecided; 4 = Agree and 5 = Strongly Agree. In the main study, the questionnaire described above was forwarded to a sample of 700 police officers who had undertaken at least one unit of the MDP. Validation data for the main study are shown in Table 4.10. Cronbach coefficient alpha ranged from .64 for

MDP Success Potential to .88 for Emotional Support. These values for internal consistency reliability show a significant improvement compared to the pilot study data (see Table 4.2). Mean correlation indices ranged from .43 for Student Support to .56 for In-Service Professional Development, Policing as a Profession and Clinical Program Delivery. These data suggest that the seven scales assess distinct but overlapping dimensions of the MDP learning environment. The conceptual distinctiveness of these seven scales supports their retention as separate scales in the final form of the questionnaire. Table 4.10 also shows the mean, standard deviation and range of scores for each scale.

TABLE 4.9 DESCRIPTIVE INFORMATION FOR THE FINAL FORM OF THE QUESTIONNAIRE

ASSESSING PARTICIPATION AND PERFORMANCE OF POLICE OFFICERS IN THE MDP (MAIN STUDY)

Scale Name	Description	Number of Items	Sample Item	
In-service Professional Development (IPD)	The extent to which an officer acknowledges the need for the planned acquisition of knowledge, experience and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout a police officer's life.	8	Professional development is important for police officers.	
Policing as a Profession (PP)	The extent to which an officer perceives policing as a profession.	7	Study of management is important for a police officer who is preparing to be, or is a manager.	
MDP Success Potential (MSP)	The extent to which an officer has been prepared and is willing to study at the level required.	7	I know how to plan an assignment for MDP.	
Student Support (SS)	The extent to which an officer needs support from the program, senior officers and family to be successful.	9	The feedback I received on assignments assisted my learning about management.	
Clinical Program Delivery (CPD)	The extent to which the mode of delivery and the learning environment created supports the participation and performance of officers.	6	Distance education for me is a convenient way to study.	
Officer-Staff Member Discourse (OSMD)	The extent to which officers feel they can engage with facilitators of the program in relation to their learning.	5	Officers can discuss with MDP staff how they can improve their learning of management.	
Emotional Support (ES)	The extent to which officers feel supported in their learning of management.	5	Within MDP, officers' individual differences are respected.	

TABLE 4.10 VALIDATION DATA FOR SEVEN SCALES INFLUENCING PARTICIPATION AND PERFORMANCE OF POLICE OFFICERS IN THE MDP (MAIN STUDY)

Scale	Mean	Standard Deviation	Range of Scores		Cronbach	Mean
Scale			Minimum	Maximum	alpha	Correlation
In-service Professional Development	27.50	4.78	11	40	.74	.56
Policing as a Profession	22.51	4.79	9	35	.81	.56
MDP Success Potential	25.18	3.56	14	35	.64	.48
Student Support	29.42	5.78	9	43	.80	.43
Clinical Program Delivery	19.97	4.20	6	30	.80	.56
Officer-Staff Member Discourse	15.53	3.52	5	25	.86	.52
Emotional Support	14.29	3.78	5	25	.88	.54

This section has explained the various steps and decisions taken to establish a valid questionnaire to collect data about the factors that affected participation and performance of Queensland police officers who undertook the MDP by distance education mode. This 47-item questionnaire assessed In-Service Professional Development; Policing as a Profession; MDP Success Potential; Student Support; Clinical Program Delivery; Officer-Staff Member Discourse and Emotional Support. Results are reported in Chapter 6 of this thesis.

4.3.3 Development of Semi-structured Interview Schedule: Phase 3

The objective of the third phase of the data collection process for this study was directly related to Research Question 5: What are the implications of the study for enhancing the delivery of the MDP? Two semi-structured interviews were conducted with the manager of the MDP and the head of the School of Management. This interview schedule was developed from an analysis of data from Phase 2 of this study which was a questionnaire completed by 475 officers of the Queensland Police Officers as outlined in the previous section of this study.

Each of the seven main concepts as outlined in Table 4.9 and, as detailed in Phase 2 of this study was addressed in the following interview schedule.

4.3.3.1 Interview Schedule: In-service Professional Development

Question 1: A significant number of officers agree that professional development is important, but the data suggest that significant numbers of officers do not value the opportunities provided through the study of MDP. What impact do you see this having on the performance of officers who undertake the program?

Question 2: Very few officers believe that senior officers appreciate the benefits of management education, or that senior members of the QPS support their study of MDP. Why do you believe officers have such perceptions?

Question 3: Just under half of those officers who responded believe that undertaking MDP would assist their professional development as a manager, and only a similar number believe that MDP would assist their career development. What impact does this have for the management of the program?

4.3.3.2 *Interview Schedule: Policing as a Profession*

Question 1: Significantly high numbers of respondents believe that management education for officers is important if QPS is to improve as an organization. Few respondents, however, believe QPS has helped them to understand the need for professional development such as MDP and few believe QPS as an organization has helped them to understand the importance of an officer having management knowledge and skills. What is the significance of this, in your opinion, for the management of the program?

4.3.3.3 Interview Schedule: MDP Success Potential

Question 1: High numbers of respondents believed that before they enrolled in MDP they did not have a high level of knowledge in relation to planning assignments? Why do you believe officers responded in this way and how can the program assist such officers?

4.3.3.4 Interview Schedule: Student Support

Question 1: Approximately half of the respondents said they would attend an orientation program for MDP in their workplace, and fewer than half said they would participate in telephone tutorials if they were offered. Why do you believe such lack of interest exists?

Question 2: About 60% of respondents said they would benefit from tutorials conducted at their workplaces, and a similar number said they would attend an assignment-writing workshop in their workplace. Are these responses significant for the delivery of the program in your opinion?

Question 3: About 59% of respondents believe that MDP staff members have a positive attitude to providing assistance to officers, and only 35% believe MDP staff members have contributed to their success with MDP. Can you see implications for the delivery of the program from these data?

Question 4: Only 31% of respondents believe that feedback received on assignments assisted their learning about management. Can you suggest a reason for this, and is it significant for program delivery?

4.3.3.5 *Interview Schedule: Clinical Program Delivery*

Question 1: Approximately half the respondents stated they found the Learning Guides easy to follow, and that MDP materials were easy to follow. What impact could such data have on the performance of officers who undertake the program?

Question 2: Just over half the respondents believe distance education is a convenient way for them to study. If officers do not like to study in this mode, could this be significant for the QPS with regard to participation and performance of officers?

4.3.3.6 Interview Schedule: Officer-Staff Member Discourse

Question 1: Approximately one-third of respondents believed they were encouraged to discuss with MDP staff how they learnt about management; how they thought when they learnt about management; could discuss different ways of learning about management; and could discuss how well they were learning about management. What implications do you believe this has for the role of MDP staff?

Question 2: Approximately half the respondents believed they could discuss with MDP staff how they could improve their learning about management. Does this have implications for the role of MDP staff?

4.3.3.7 Interview Schedule: Emotional Support

Question One: 34% of respondents believed that within MDP officers are treated fairly; 24% believe that officers' efforts are valued; 20% believe that their ideas are respected; 18% believe that their individual differences are respected and 18% believe officers' suggestions are appreciated. How could these levels of emotional support be raised, and are they significant for the delivery of the program?

Question 2: Approximately half of the respondents recorded undecided for these five questions. Can you suggest a reason for this, and is such data significant for the program?

The central theme for the interview questions related directly to the context and delivery of the MDP, as well as the enhancement of the program for officers of the QPS. In accordance with the topic of this study, factors that affected the participation and

performance of officers who undertook the program were central to these interviews. Data sought from each of the seven concept areas included in the interview schedule related directly to enhancement of the program because the two personnel interviewed were in a position to implement changes to practice, to liaise with senior members of the service, and to seek funding to provide additional services to officers enrolled in the program.

As a means of validation for this interview schedule, an academic colleague checked findings from the analysis of Phase 2 data of this study. Questions developed for each concept area were verified in a similar way.

4.4 CONCLUSION

This chapter has reported the development of the interview schedules used for Phases 1 and 3 and the development and validation of the questionnaire that was used for Phase 2 of this study. The objective for each of the three phases of data collection and how each phase was linked to the overall study has been explained.

Concepts that formed the basis for the questionnaire in Phase 2 of this study were derived from the data gained from the semi-structured interviews in Phase 1. Similarly, data gained from the questionnaires in Phase 2 formed the basis for the interview schedule used with the manager and the head of the School of Management of the MDP in Phase 3. This final phase addressed specifically the issue of delivery enhancement strategies for the MDP.

Information has been provided about the construction of the interview schedules for Phases 1 and 3 of the data collection process for this study. The process employed for the initial development of the schedule and then the pilot interviews has been documented. While the nature of the interview process was different for Phase 3, the process for developing the schedule has been clearly outlined.

Development of the questionnaire used in Phase 2 of this study and its links to Phase 1, have been documented. Concepts employed in the pilot questionnaire were derived from data gained from the semi-structured interviews conducted in Phase 1. The inclusion of two additional scales from The Metacognitive Orientation Learning Environment Scale – Science (MOLES – S) in the final form of the questionnaire has been outlined. Specific processes employed in questionnaire construction have been documented including, in addition to the initial concept development, issues about questionnaire item wording, evaluation of the items, layout of the questionnaire and the use of a Likert scale. In addition, the process for checking scale internal consistency following the entering of data from the pilot has been explained, as has the process for removing items that did not correlate with the remaining items in the scale. Changes to questionnaire items have been documented. This chapter provides essential background for the following three chapters that report results of all three phases of data collection. Chapter 5 reports the results of qualitative data analysis for Phase 1 of the study, Chapter 6 reports results of the quantitative data analysis for Phase 2 and Chapter 7 reports the results of qualitative data analysis employed for Phase 3 for this study of the factors that affected the participation and performance of officers of the QPS who undertook the MDP.

CHAPTER 5

RESULTS OF PHASE 1 OF STUDY

5.1 INTRODUCTION

This chapter reports results of the first phase of data collection for this study of the factors that affected participation and performance of officers who undertook a management development program by distance education within the QPS. The first phase of data collection provided the basis for Phase 2 of the study that was the development of a questionnaire that was forwarded to 700 officers of the service who had completed at least one unit of the MDP. Phase 3 of the data collection process was based on data derived from two interviews conducted with the manager of the MDP and the head of the School of Management. The purpose of this chapter is to answer Research Question 1: What are the key factors that influence participation and performance by officers of the Queensland Police Service undertaking the Management Development Program by distance education?

The purpose of this introduction is to explain the background to the development of the interview schedule used in Phase 1. Figure 5.1 re-states Research Question 1 and illustrates the background to the development of the interview schedule, the conduct of the six interviews, the analysis of interviews and the identification of five concept areas that subsequently formed the basis for scale development used in Phase 2 of this study.

Before the interview schedule for Phase 1 could be developed, the researcher conducted learning conversations with three facilitators of the MDP who were not directly involved in data collection for this study. Information gained from these conversations was used as the basis for the interview guide. These conversations were designed to assist the researcher to understand the nature of the program and to identify issues related to the factors that affected participation and performance of officers who undertook the program. The objective was to use the learning conversations as a vehicle for the preparation of the

interview schedule to address Research Question 1. Learning conversations focussed on the context for the delivery of the MDP that was part of continuing education and professional development provided for officers of the QPS. The reason the MDP was developed and introduced, as outlined in Chapter 1 of this thesis, was also an important focal point for the learning conversations with those directly involved in the educational delivery aspects of the program.

The context for this study was the delivery of the MDP as well as the QPS. Officers at the rank of senior constable, sergeant and senior sergeant were key stakeholders in this program and the focus for this study. Facilitators of the MDP had considerable direct experience with the officers as students of the program, and the perceptions of facilitators about the nature of the student body were valuable for the development of an interview schedule for data collection about the participation and performance of officers enrolled in the program. Additional aspects explored that were important to this study were the nature of the learning environment created by facilitators and the QPS, the mode and strategies for delivery of the program, and how learning was assessed. Learning support is fundamental to any educational program and this aspect was also explored as it related to participation and performance of officers who undertook the MDP.

Following the learning conversations, an interview schedule was developed and three pilot interviews were conducted. This schedule was subsequently used for the six semi-structured interviews that formed the basis for data collection for Phase 1 of this study. Data collected related to Research Question 1: What are the key factors that influence participation and performance by officers of the QPS undertaking the MDP by distance education?

Figure 5.1 illustrates the background to data collection and the process for the qualitative data analysis employed for Phase 1 of this study. This process began with Research Question 1 as the focus. The context of the MDP was examined and a series of areas that would form the basis for the learning conversations was determined. Learning conversations were conducted with three facilitators who were not involved in data

collection for this study. Data collected through the learning conversations were analysed and an interview schedule was prepared based on these data. Three pilot interviews were conducted. Six interviews with facilitators of the MDP were subsequently conducted.

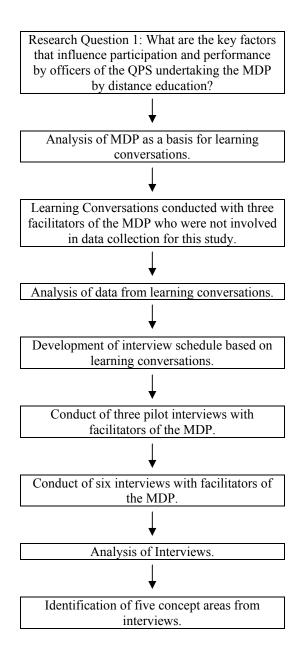


Figure 5.1 Steps in Phase 1

This chapter provides information about how the data from the six interviews were analysed. Evidence for the identification of the five concept areas: In-Service Professional Development (IPD), Policing as a Profession (PP), MDP Success Potential (MSP), Student Support (SS) and Clinical Program Delivery (CPD) is provided. Section 5.2 explains the process of analysing data collected from the six interviews with facilitators of the MDP. Section 5.2.1 details the five concept areas that were explored during the interviews while Section 5.2.2 provides the results of data collected from the six interviews. Sections 5.2.2.1 provides an analysis of data in relation to factors that encouraged officers to participate in the MDP while Section 5.2.2.2 addresses factors that discouraged officers from participating in the MDP. Section 5.2.2.3 considers data in relation to issues that might affect an officer's performance in the MDP. Section 5.2.2.4 provides an analysis of possible reasons an officer might terminate his or her enrolment in the MDP and Section 5.2.2.5 explores factors that must be addressed with regard to providing support for officers enrolled in the MDP. Using data presented in Section 5.2.2, Section 5.3 demonstrates how five main concept areas were identified from the responses provided by interviewees. Justification for the identification of In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery as concept areas is provided. Scale development for the questionnaire used in Phase 2 of this study was subsequently based on these five main concept areas that were identified.

5.2 ANALYSIS OF INTERVIEW DATA

5.2.1 Organizing Data from the Six Semi-structured Interviews for Phase 1

As stated previously, Research Question 1 (see Figure 5.1) was the focus for this phase of the data collection process. Six interviews were conducted with experienced facilitators who were directly involved in the delivery of the MDP. Three of the facilitators interviewed were police officers and the three other interviewees were staff members. The interview schedule was derived from the learning conversations about the nature of the program, and the context of the program for continuing education and professional

development offered by the QPS. The learning needs of the officers who enrolled were also considered as were aspects related to the delivery of the program.

Five central areas were explored through the semi-structured interviews:

- Factors that encouraged officers to participate in the MDP
- Factors that discouraged officers from participating in the MDP
- Issues that might affect an officer's performance in the MDP
- Possible reasons an officer might terminate his or her enrolment in the MDP, and
- Factors that must be addressed with regard to providing support for officers enrolled in the MDP

5.2.2 Results of Analysis of Data

All interviews were conducted and transcribed by the researcher and a copy of the transcripts was provided for each facilitator to verify that the perceptions as transcribed were valid. Each transcript was analysed to identify the salient themes and recurring ideas. A copy of all interview transcripts for Phase 1 has been included in Appendix B. Subsections 5.2.2.1 – 5.2.2.5 that follow provide results based on the five central areas that were explored through the semi-structured interviews and are: factors that encouraged officers to participate in the MDP, factors that discouraged officers from participating in the MDP, issues that might affect an officer's performance in the MDP, possible reasons an officer might terminate his or her enrolment in the MDP and factors that must be addressed with regard to providing support for officers enrolled in the MDP.

5.2.2.1 Data in Relation to Factors that Encouraged Officer Participation in the MDP

The question "What factors do you think encourage officers to participate in the MDP?" generated many categories of responses. The MDP was part of the provision of continuing education and professional development offered by the QPS. The MDP, as noted in Chapter 1 of this thesis, was a program that officers were compelled to undertake to be

eligible to apply for promotion. As indicated by all facilitators who were interviewed, many officers clearly resented the compulsory nature of the program and resistance to undertaking the study was evident in the attitude of officers as was frequently communicated to facilitators. Officers who sought promotion, however, enrolled in the program. As Facilitator 1 stated "I think... that students feel compelled to complete their MDP for promotion. Unfortunately that seems to be the predominant reason why they do it." As an incentive, officers who undertook the program were eligible for pay increments for individual units completed satisfactorily.

Benefits to officers through completion of the program were considerable. Some officers saw the completion of the MDP as an inexpensive way to gain self-development to include in curriculum vitaes as was noted in the following comment by Facilitator 4: "Another reason would be that they complete MDP because it's an inexpensive way of gaining some self-development for their resume." While some officers also saw enrolment in the program as a way to test their ability for further university education, others saw it as a free qualification for which they could gain recognition of prior learning from universities such as was reflected in the comment by Facilitator 3 "There are a few students...who appreciate the articulation arrangements that we have organized with other universities..." In this regard, the QPS had negotiated such recognition with five Australian universities. Some officers appreciated the delivery of the program in the distance education mode because of the flexibility of opportunity for study it offered irrespective of their geographic location in Queensland. As Facilitator 4 stated "...distance education is an effective way for police culture. It's flexible whether they're in the stock squad away for a few weeks, or if they're in a remote location, it's effective."

From a service perspective, facilitators believed that support for the program by senior members of the service encouraged officers to enrol in the program. This is reflected in the comment by Facilitator 6 "I think if upper management is seen to condone a program like the MDP then that is one of the first and most important steps towards participation at lower levels." The enthusiasm and credibility of facilitators and managers of the program also encouraged officers to enrol. Positive feedback from other officers who had

undertaken the program was also seen to encourage participation. Further, communication by senior members of the service about the personal and organizational benefits of undertaking the program had a positive effect on an officer's decision to enrol in the program.

Facilitators also believed that those officers who had undertaken undergraduate qualification independently of the QPS were more positive about the benefits of continuing education and professional development generally. Some officers were positive about undertaking professional development and the completion of management education as was evidenced in the comment by Facilitator 6 "They thought that they had nothing further that they could learn. MDP gave a fresh view on things happening around them and their responsibilities as managers." A general belief was that those officers who benefited from the program were those who had a positive attitude and expected to benefit from the program.

In summary, specific results of interview data for factors that encouraged officer participation in the MDP and concepts areas identified are shown below:

- Desire to be eligible for promotion (PP)
- Inexpensive way to gain self-development (IPD)
- Use of qualifications to gain recognition of prior learning (IPD)
- Delivery in the distance education mode (CPD)
- Support by senior officers (SS)
- Enthusiasm and credibility of facilitators (CPD)
- Positive feedback from senior officers (PP)
- Possession of undergraduate qualification (MSP)

5.2.2.2 Data in Relation to Factors that Discouraged Officer Participation in the MDP

With regard to continuous education and professional development, facilitators believed many officers lacked commitment to professional development generally and did not

embrace the notion of life-long learning. The following comment by Facilitator 5 is representative of such beliefs: "I think there are a number of factors and the primary one is ignorance of the benefits of further education." Facilitators of the program believed officers had a more positive attitude towards professional development that had an operational focus as opposed to professional development of management skills.

As noted from the perceptions of facilitators, a recurring theme was that the organizational culture of the QPS did not actively embrace continuing education and professional development, and many officers lacked an understanding of the academic process. This is supported by the previous quote about the benefits of further education. As noted in Chapter 1 of this thesis, the MDP was offered at postgraduate level and many officers who were compelled to enrol in the program if they wanted to be eligible for promotion, did not have an undergraduate degree. A quote from Facilitator 3 supports this as noted "...the academic standards of the course discourage some. With the course being at postgraduate level, we still have some students who don't have an undergraduate degree, so they haven't got an academic basis to build on, so they find that the study is extremely difficult." As noted in Chapter 4 of this thesis, of the 475 officers who completed the questionnaire, only 109 had qualifications at bachelor degree level or higher.

Additional factors related to the academic nature of the program. The MDP was developed at postgraduate level and this was seen to discourage many officers from enrolling because of a fear of failure, a fear of the academic process and a fear of the unknown generally. This is reflected in the following comment by Facilitator 3: "I guess there are also the ones who as adults have not done a lot of study and therefore have had some of those fears that adult students do have when they first start studying." Factors that contributed to non-participation by officers included time available for study and commitment to family and other interests. A pattern that emerged from the interviews was that many officers did not have a desire to undertake professional development, and had little interest in career progression. Undertaking the MDP was not valued as an educational activity.

Perceptions held about the program by officers also impacted on an officer's attitude to

undertaking the study. Of the 6 facilitators interviewed, 3 believed that the way the MDP had been implemented initially gave the program a negative image because it was perceived by officers of the service that conditions for promotion had been made much more difficult, thus limiting the career progression opportunities. As Facilitator 4 said about negative perceptions held about the MDP, officers resented the "principle of having to do it."

In summary, specific results of interview data for factors that discouraged officer participation in the MDP and concepts areas identified are shown below:

- Lack of commitment to professional development (IPD)
- Officer preference for professional development with an operational focus as opposed to development of managerial skills (IPD)
- An organizational culture that did not support continuing education and professional development (PP)
- Lack of understanding of the academic process (MSP)
- Postgraduate level at which the program was set (MSP)
- Time available for study (MSP)
- Commitment to family and other interests (MSP)
- Perceptions held about the MDP (PP)

5.2.2.3 Factors that Might Affect an Officer's Performance in the MDP

As noted in Chapter 1 of this thesis, the main basis for the introduction of the MDP was the need to transform policing from vocational to professional status. Inherent in this notion was the need for officers to be educated, particularly at postgraduate level, as opposed to having training to perform operational roles only. The perception of facilitators generally was that many officers still embraced the idea that policing was a vocation that involved enforcement of the law and offering a service to the community by providing a secure

environment. Many officers saw their roles as technical as opposed to professional, and resented the changes they felt had been imposed by the QPS.

Such changing requirements for promotion were resented, as in the past many officers had been promoted because of seniority and professional development had not always been a requirement for promotion. This was reflected in the comment by Facilitator 4: "Although they don't have to do it, the fact that other people before them have got promoted and they haven't had to do it." Also, some officers perceived the introduction of the MDP as "a barrier set up to ensure not so many officers could get promoted." (Facilitator 1) Lack of support for the program by senior members of the service was seen to have an adverse effect on the acceptance of the MDP as a valuable program for officers and the service. As Facilitator 5 commented "Comments from people in the regions do not indicate a high level of support at the executive level."

Motivation of officers and academic ability levels were considered significant in relation to an officer's performance in the program. An analysis of the interview data indicated that intrinsic motivation of officers was a key factor contributing to positive performance of officers enrolled in the program. Those who were focussed on career progression and self-development had a positive attitude to education generally and to undertaking the MDP. Further, an officer's ability to read and write for academic purposes, to interpret assignment topics, and to pay attention to detail were all seen as having an impact on an officer's ability to perform well. In relation to what may affect an officer's performance Facilitator 6 stated it related to "What they bring with them in terms of their entry-level skills which quite often are developed in other educational programs."

From a policing perspective, an officer's exposure to corporate aspects of policing, as opposed to general duties policing, was also seen as a contributing factor such as was noted in the following quote by Facilitator 6 "Their exposure to corporate elements within the QPS – management and policy at the corporate levels will put them at an advantage compared to those who have only been exposed to general duties policing." The belief was that those officers who were exposed to organizational planning at the strategic level had a

deeper appreciation of the benefits of such processes and the need for sound management practices to implement such plans.

The role and actions of the QPS Union for un-commissioned officers were also seen to

impact negatively on the attitudes of officers to policing having a professional status. The union was seen to be negative toward continuing education and professional development, and an anti-intellectual police culture was fuelled by the union's attitude. "...the union ...espouses negative values which do not encourage police to undertake MDP." (Facilitator 6) A recurring idea noted in the data was that many officers at the ranks of senior constable, sergeant and senior sergeant did not have any desire to embrace policing as a profession, and were content to operate within a vocational context. In consequence, facilitators did not perceive a positive attitude toward undertaking professional development in management education by many officers who were enrolled in the program, and with whom the facilitators had direct contact. Many officers focussed their interests on operational policing without appreciating that units involved in operational policing also required sound management, particularly managing people.

In summary, specific results of interview data for factors that might affect an officer's participation in the MDP and concepts areas identified are shown below:

- Perception of policing as a vocation (PP)
- Changed requirements for promotion (PP)
- Degree of support for MDP by senior officers (IPD)
- Motivation of officers (MSP)
- Academic ability levels (MSP)
- Intrinsic motivation (MSP)
- Ability to read and write for academic purposes (MSP)
- Exposure to corporate aspects of policing (PP)
- Role and actions of QPS Union (PP)

5.2.2.4 Factors that Might Influence an Officer's Termination of Enrolment in the MDP

While many officers resented having to undertake management education to be eligible for promotion, the high numbers of officers who enrolled but subsequently terminated their enrolment was cause for concern for managers of the program. Because the MDP was an in-service educational program, the three units of management education were offered free-of-charge to officers. Officers were permitted to withdraw and re-enter the program without penalty, and the only entry requirement was that an officer had to be at the pre-requisite rank to be eligible to enrol, that is a senior constable could enrol in level 1, a sergeant in level 2 and a senior sergeant in level 3.

These interviews generated significant data about issues that may affect an officer's performance in the program, particularly about an officer's decision to terminate enrolment. A significant feature to evolve about an officer's decision to terminate his or her enrolment was the lack of previous academic experience when trying to successfully complete an education program at the postgraduate level. This was reflected in the following comment by Facilitator 3: "If they haven't experienced tertiary education in the classroom, it is much harder with this tertiary study being by distance education..." Also, "They have no appreciation of the effort and dedication that you have to have to do a postgraduate subject." (Facilitator 3) Facilitators cited the entry-level skills of officers, their level of ability to write academically and their level of research and analytical skill as areas that caused considerable difficulty for many officers. In addition, as Facilitator 6 said "I think the catalyst for all this is failure. Failure leads to disillusionment and the lack of success may be attributed to insufficient support networks to meet student needs." A consequence of failure was withdrawal from the program.

A further key area to emerge in regard to an officer's decision to terminate his or her enrolment was the individual officer's attitude to education and training, as is reflected in the following quote by Facilitator 1: "I don't think too many officers are positive about education, unfortunately. Some are, but not so many." Explanations offered by facilitators

about the attitude of officers included the level of resentment an officer had to undertaking the program, his or her willingness to commit the time required to perform successfully and a lack of appreciation of how much individual effort was required to perform satisfactorily. In addition, laziness, an individual's unwillingness to persevere, a fear of tertiary study that resulted in a lack of confidence in their own ability, and a lack of career ambition were features quoted by facilitators. The delivery of the program by distance education mode was also cited as not suiting the learning style of some officers, while it was seen as a positive aspect, because of its flexibility, for others. The positive aspect was reflected in the comments of Facilitator 4 who stated "I think distance education is an effective way for police culture. It is flexible in terms of the time they can do it. It's flexible for whether they're in the stock squad away for a few weeks, or if they're in a remote location its effective. It's fair, right across the board."

The police culture, particularly as it related to education and training, was cited as another issue that impacted on an officer's decision to terminate his or her enrolment in the program. Inherent in this aspect was an officer's perception of the importance of management education for those in a management role. Work commitments were seen to contribute significantly to an officer's decision to terminate enrolment. This was noted in the following comment by Facilitator 4. "There are a lot of police...who are on call when they leave work, so that impacts on them. For instance, some stations are single officer stations."

Officers needed time to meet personal and family commitments and lack of time often led to an officer's withdrawal from the program. Many officers failed to avail themselves of the learning support offered by the program, and instead of seeking assistance or extensions of time to complete assessment items chose to withdraw from the program.

In summary, specific results of interview data for factors that might influence an officer's termination of enrolment in the MDP and concepts areas identified are shown below:

• Lack of previous academic experience (MSP)

- Entry level skills of officers (MSP)
- Level of ability to write academically (MSP)
- Level of research and analytical skills (MSP)
- Attitude to education and training (MSP)
- Laziness (MSP)
- Unwillingness to persevere (MSP)
- Fear of tertiary study (MSP)
- Lack of career ambition (PP)
- Delivery of MDP by distance education mode (CPD)
- Police culture in relation to education and training (PP)
- Work commitments (MSP)
- Lack of time (MDP)

5.2.2.5 Factors in Relation to the Provision of Student Support for Officers Enrolled in the MDP

An officer's potential for success in the MDP was affected by many factors including the nature of learning support an officer needed to achieve well and to maintain his or her enrolment in the program. Factors that emerged from the interviews included an officer's attitude to study and the level of confidence towards study an officer exhibited. An officer's willingness to accommodate to study, to accept change and to adapt to study was also cited by facilitators because of the impact on an officer's potential for success. Facilitators believed many officers needed pre-enrolment support to ensure they had the required skills to cope with academic study.

When considering organizational issues, facilitators believed that officers needed to be made aware by the QPS of the benefits of undertaking the study, the reasons for the introduction of the program and the anticipated benefits, not only for the individual officer, but also for the organizational improvement of the service. Police culture was again raised as an issue. Officers believed it would be perceived as a sign of weakness if they sought assistance. As Facilitator 4 stated "...there is a genuine reluctance for the student"...

population to contact the facilitators, no matter what strategy is employed." An analysis of the interview data revealed learning support was needed from facilitators, the QPS generally and especially from members of senior management.

Throughout the interviews, reference was made to the mode of delivery of the MDP and specific support needed for officers. As noted earlier in this thesis, the completion of specific units of the MDP was a compulsory requirement for an officer to be eligible to apply for promotion. Because officers were geographically located throughout Queensland, the program had to be offered in a mode that could be accessed by all officers seeking to enrol. While the distance education mode of learning was seen to suit some officers because of the flexible nature of the mode of delivery, some facilitators believed that some officers would prefer to learn through residential programs in a face-to-face delivery context. As Facilitator 3 stated "Distance education discourages some students as anyone who does not enjoy reading is going to be discouraged by that method, and the fact that that is the only method of delivery that we use." Facilitators expressed concern with regard to meeting the needs of officers because of the diverse range of educational backgrounds and learning styles they encountered.

The content of the units of study and strategies to promote learning were also considered significant with regard to student support. The issue of content of materials related to currency and relevance for the QPS context and as Facilitator 5 said "I think it is very important that we do have a body of current knowledge. I think that that's probably an essential feature of learning within organizations, like taking the general level of knowledge in the QPS to a higher level generally." With regard to actual materials provided, the incorporation of sound instructional design techniques in the materials was seen as important for encouraging learner success. The level of support offered through direct academic support, motivation, and encouragement was also seen as fundamental to an officer's potential for success. In addition, facilitators supported visits to regional areas to provide direct tutoring as well as the conduct of telephone tutorials as valuable tools in the provision of support for officers. This was reflected in such comments as (Can we)..."Look at providing more facilitator contact?" and "Can we introduce some type of

tutorials and re-introduce regional visits?" (Facilitator 3) Facilitators also supported assignment marking techniques that focussed on enhancing learning for officers.

Additional factors with regard to the provision of support related to program delivery aspects such as qualifications of facilitators who were employed within the program, and the need for all facilitators to be qualified at postgraduate level. A further issue was the ratio of officers enrolled to facilitators and this was also seen as an important contributing factor, especially because of the uniqueness of the program and the lack of academic skills possessed by many officers who enrolled in the program.

From an organizational perspective a further issue raised was the need for support from the QPS in the marketing of the importance of the MDP to the individual's continuing education and professional development, and to the enhancement of the organization generally. As Facilitator 3 stated "The service can help us market MDP well, and the Union... must start realizing that it is a normal practice in both the public sector and the private sector for managers to undergo management training... The police are not being asked to do anything different from what the majority of people in the workplace these days are being asked to do if they want managerial positions."

In summary, specific results of interview data for factors in relation to the provision of student support for officers enrolled in the MDP and concepts areas identified are shown below:

- Nature of learning support required (SS)
- Attitude to study (MSP)
- Officer willingness to accommodate to study (MSP)
- Need for pre-enrolment support (SS)
- Need to be made aware by the QPS of the benefits of undertaking study (PP)
- Effects of police culture (PP)
- Seeking assistance perceived as weakness (PP)
- Need for learning support (SS)

- Delivery in the distance education mode (CPD)
- Diverse range of educational backgrounds and learning styles to be addressed by facilitators (SS)
- Content of materials (CPD)
- Design of learning materials (CPD)
- Level of learning support offered (SS)
- Visits to regional areas by facilitators (CPD)
- Assignment marking techniques that support learning (SS)

As illustrated in Figure 5.1, this section has considered the data collected from the interviews conducted with six facilitators of the MDP. These data were used as a basis for the identification of the five areas as outlined in Section 5.3: In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery.

5.3 AREAS IDENTIFIED FROM ANALYSIS OF DATA

An analysis of data presented in Section 5.2.2 led to the identification of five concept areas relating to the participation and performance of officers undertaking the MDP:

- In-service Professional Development
- Policing as a Profession
- MDP Success Potential
- Student Support
- Clinical Program Delivery

Justification for the identification of these five concept areas is provided in Sections 5.3.1 – 5.3.5. These areas subsequently provided the basis for the scales that were developed for Phase 2 of the data collection process for this study. As noted in Chapter 4 of this thesis, two additional scales supported these five scales. These were Officer-Staff Member Discourse and Emotional Support and were adapted from The Metacognitive Orientation

Learning Environment Scale - MOLES (S) (Thomas, 2002). These two scales were considered important for gaining information from police officers about their perceptions of the MDP, and these aspects did not arise during the interviews conducted for Phase 1 of this study.

This study was based on the factors that influenced the participation and performance of officers of the QPS who undertook the MDP by distance education mode. The concept areas as listed evolved from the data collected during Phase 1 and the identification of these areas was important to answering Research Questions 2, 3 and 4 in Phase 2 of this study:

Question 2: Can valid scales to assess the factors that influence participation and performance by officers undertaking the MDP be developed?

Question 3: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP?

Question 4: Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?

Sections 5.3.1 – 5.3.5 provide justification for the identification of these five concept areas: In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery.

5.3.1 Area 1: In-service Professional Development

In-service Professional Development was identified as one area because the MDP, on which this study was based, was part of a program of continuing education and professional development offered by the QPS. Clear support for this category was noted in the analysis of data from the interviews and the following justification is provided.

Issues that became evident from the data about In-service Professional Development were the attitude of the individual officer to undertaking continuing education and professional development, and the role and importance of continuing education and professional development from an organizational perspective. Determining the attitude of officers to continuing education and professional development was important for answering the research questions. In this category, the issue of an officer accepting responsibility for his or her professional development was important, as was an officer's attitude to career progression and his or her belief that undertaking the MDP would assist their career progression and professional development as a manager. Data collected from facilitators indicated that many officers lacked interest in career progression, and that many lacked a desire to learn about management. Facilitators believed some officers did, however, appreciate the free professional development that was offered by way of the MDP and the recognition of prior learning that was offered by five Australian universities to officers who successfully completed the three units of management education.

Organizational issues about in-service professional development related to an officer's understanding of the role of continuing education and professional development in organizational improvement, and for improvement of the service level offered to the community, and how these aspects were communicated to officers. The attitude of senior officers of the QPS to the MDP was believed to have a significant impact on the attitude of individual officers to undertaking in-service professional development.

5.3.2 Area 2: Policing as a Profession

As noted in Chapter 1 of this thesis, the MDP was developed in response to a desired change for the QPS from vocational to professional status. The category Policing as a Profession evolved from an analysis of the data from the six semi-structured interviews, and its justification is provided based on the following evidence.

Evidence suggested an officer's acceptance of the importance of the MDP to the QPS was based on an officer's acceptance of policing as a profession, as well as a willingness to

embrace the change from vocational to professional status. Additionally, an officer's understanding of the factors that contributed to making the QPS a professional service organization were important to consider. Such factors related to an officer's understanding of all elements of the organization and that sound management principles and practices were fundamental to the operational tasks of policing. Inherent in this was the need for the organization to help officers to understand the nature of management as a discipline and to provide management education for officers of the service.

Additional issues raised by facilitators related to the need for officers to have a positive attitude toward excellence in all aspects of service delivery including management. As well, the QPS had a role in promoting the importance of the change to the professional status of policing and the inherent requirements, for example continuing education and professional development, to achieve such status.

5.3.3 Area 3: MDP Success Potential

Facilitators believed there were several issues that contributed to an officer's potential success in the MDP in addition to an officer's attitude to policing as a profession and to continuing education and professional development in the form of management education. Evidence provided from an analysis of the data indicated that an officer's potential for success could be related to four additional areas. These were the skill-level possessed by an officer on entry to the program, personal characteristics and behaviour of officers, external influences, and factors related to the delivery of the program. With regard to entry-level skills of officers, as noted previously in this thesis, the completion of an undergraduate degree was not a requirement for entry to the MDP. Those officers who had not studied at this level experienced considerable difficulty accommodating to the requirements of a program offered at the postgraduate level.

Personal characteristics and behaviour was the second area that impacted on an officer's potential to complete the program successfully. An analysis of interview data indicated a fear of undertaking academic study, a lack of academic confidence, laziness, lack of

ambition, lack of understanding of the academic process, a limited ability to read and interpret text, and limited academic writing skills as potential problems. As well, a limited ability to understand the content of the material, a poor understanding of the academic processes inherent in interpreting an assignment topic, and an inability to employ analytical and conceptual skills to answer the assignment question were cited. In addition, poor time management skills, the lack of appreciation of effort required to be successful at the postgraduate level and an unwillingness to contact facilitators for support were also cited.

Additional external factors that contributed to an officer's potential for success within the program related to the time an officer had to devote to study as well as an officer's commitment to meeting family and other responsibilities. Further, the nature of an officer's work commitments, whether officers had sole responsibility for the operation of police stations or were involved in covert operations, had the potential to impact on an officer's potential for success. The attitudes of senior members of the service and colleagues to undertaking the MDP also impacted on lower-ranked officers.

Factors relating to program delivery included the postgraduate level at which the program was offered, the relevance of the content of the learning materials to police management contexts as perceived by officers, and the attitude of facilitators and level of support they provided.

5.3.4 Area 4: Student Support

Evidence for the establishment of the student support category was provided from an analysis of the data that indicated the importance of student support and delivery characteristics of the MDP, and those strategies that would support an officer's learning and contribute to successful completion of the program.

Key issues derived from the data about student support related to the role played by individual facilitators in their relationship with officers, features of educational programs

officers enrolled in the program. A positive attitude by facilitators and managers to providing support to officers enrolled in the program was fundamental to an officer's success in the program. The practical aspects of support such as ensuring the materials were current and relevant to a police officer, the provision of assistance with assignment completion by email and the provision of appropriate and helpful feedback on assessment items that enhanced an officer's learning were considered fundamental to effective student support. An additional factor was the need for qualified facilitators with an inherent ability to provide learning support from a management, as well as an educational perspective.

Features of distance education programs that were considered important for the effective support of officers enrolled in the MDP included the provision of orientation programs in regions, the provision of telephone tutorials, the conduct of assignment-writing workshops in workplaces and visits to workplaces throughout Queensland by facilitators to provide tutorial assistance to officers. The provision of an adequate ratio of facilitators to officers to deliver the program was a further key factor that impacted on the level of support that could be offered to officers.

5.3.5 Area 5: Clinical Program Delivery

While this category was derived from an analysis of the data it was also fundamental to the MDP as it was linked to the philosophy that supported the program from an organizational perspective. Features included the mode of delivery, the relevance of the content of the program, how the learning materials were organized, the relevance of assessment methods and the flexibility of the program to accommodate student needs.

As noted previously in this thesis, the MDP was delivered in distance education mode because of equity of access issues for all officers who were required to successfully complete the program if they sought promotion within the QPS. This mode of delivery was the most suitable because officers were geographically located throughout Queensland.

Relevance of the content of the material was seen to affect an officer's participation and performance as material had to provide fundamental management principles but within a policing context. Learning materials included learning guides and readings to complement the content. Learning guides had to be easy to follow and the readings provided had to be relevant to a policing context. Assessment items had to reflect the learning outcomes of the individual units, and be relevant to the management duties of an officer of the QPS.

Flexibility through the policies developed to support the delivery of the MDP permitted individual officer's circumstances to be addressed particularly with regard to the provision of extensions of time to complete assessment work, and the carrying forward of enrolment from one semester to the following one because of extenuating circumstances such as work commitments, or the need to attend to family issues.

5.4 CONCLUSION

This chapter has provided the results of the qualitative data analysis for Phase 1 of this study. For Phase 1, Research Question 1 was the focus for the learning conversations that focussed on the context of the MDP and provided the basis for the development of the interview schedule as outlined. Six semi-structured interviews were conducted with experienced facilitators of the program and the process for organizing data from these interviews was outlined. The process for analysing data was provided in relation to:

- Factors that encouraged officer participation in the MDP
- Factors that discouraged officer participation in the MDP
- Factors that might affect an officer's performance in the MDP
- Factors that might influence an officer's termination of enrolment
- Factors in relation to the provision of student support

The process for identifying and justifying each concept area has been documented. Areas identified were:

In-service Professional Development

- Policing as a Profession
- MDP Success Potential
- Student Support
- Clinical Program Delivery

Areas identified from the analysis of data were subsequently used to inform the development of scales that were combined to form the questionnaire that was the basis for the quantitative data collection in Phase 2 of this study.

Discussion above has answered Research Question 1: What are the key factors that influence participation and performance by officers of the Queensland Police Service undertaking the Management Development Program by distance education? Five areas that are the key factors that influence participation and performance by officers undertaking the MDP have been identified. These Phase 1 results have been used to inform the development of the questionnaire for use in Phase 2 of this study and contribute to answering Research Question 2 which asks: Can valid scales to assess the factors that influence participation and performance by officers undertaking the MDP be developed? Results of Phase 2 of this study, the quantitative component, are reported in the following chapter.

CHAPTER 6

RESULTS OF PHASE 2 OF STUDY

6.1 INTRODUCTION

Data reported in the previous chapter were based on interviews conducted during the first phase of the data collection for this thesis. The purpose of this chapter is to report the results of Phase 2 of this study. Phase 2 employed a context-specific questionnaire that was developed from the data collected during Phase 1 of this study that investigated the factors that affected the participation and performance of officers who undertook the MDP by distance education as part of a professional development program offered by the QPS. Research Question 2 asked if valid scales to assess the factors that influence participation and performance by officers undertaking the MDP could be developed. Results of Phase 1 have contributed to the development of such valid scales as is evidenced in the construction of the questionnaire. This chapter reviews findings of the quantitative data analysis.

An analysis of these data answered Research Questions 3 and 4. Research Question 3 stated: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP? Sub-questions related to Research Question 3 were related to the independent variables of officers' characteristics of gender, age, dependent children, current rank, type of duty performed, highest educational level attained, and geographic location within Queensland. These sub-questions are shown in Table 6.1. Research Question 4 asked if a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP could be developed?

TABLE 6.1 SUB-QUESTIONS FOR RESEARCH QUESTION THREE

Question 3.1	What is the effect of gender on factors influencing participation and performance of officers enrolled in the MDP?
	•
Question 3.2	What is the effect of age on factors influencing participation and performance
	of officers enrolled in the MDP?
Question 3.3	What is the effect of dependent children on factors influencing participation
	and performance of officers enrolled in the MDP?
Question 3.4	What is the effect of current rank on factors influencing participation and
-	performance of officers enrolled in the MDP?
Question 3.5	What is the effect of type of duty performed on factors influencing
	participation and performance of officers enrolled in the MDP?
Question 3.6	What is the effect of educational level attained on factors influencing
	participation and performance of officers enrolled in the MDP?
Ouestion 3.7	What is the effect of geographic location on factors influencing participation
	and performance of officers enrolled in the MDP?

In addition, as outlined in Chapter 4 of this thesis, an analysis of these data was also used to inform the development of the interview schedule for Phase 3 of the data collection process for this study. Phase 3 sought to answer Research Question 5 as outlined in Chapter 3 of this study. The questionnaire was distributed to 700 officers of the service who had completed at least one unit of the MDP and who were geographically located throughout Queensland. A total of 475 completed questionnaires were returned for analysis. Details of the sample and the data collection sites have been provided in Section 3.3.3 of Chapter 3 of this thesis.

The research design of this study involved the use of seven dependent variables. They were In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support. The independent variables used were gender, age, dependent children, current rank, type of duty performed, highest educational level attained and geographic location in Queensland. Officers to whom the questionnaire was forwarded were at the rank of senior constable, sergeant, senior sergeant or commissioned officer.

Section 6.2 of this chapter reports the responses to Research Questions 3 and 4. Sections 6.2.1 - 6.2.7 provide information relating to the effects of gender, age, dependent children, current rank, type of duty performed, educational level attained and geographic location on factors influencing participation and performance. Section 6.3 responds to Research

Question 4, and includes a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP.

6.2 FACTORS AFFECTING PARTICIPATION AND PERFORMANCE OF OFFICERS ENROLLED IN THE MDP

6.2.1 What is the Effect of Gender on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

Of the 475 officers who responded to the questionnaire 53 indicated they were female and 422 identified themselves as male. To investigate the effect of gender (viz. female and male officers) on the seven scales assessing the influences on participation and performance in the MDP, a one-way MANOVA with the seven scales as dependent variables and gender as the grouping variable was performed on the data. Wilks' λ criterion for this test (0.22) was not statistically significant (p>.05).

Univariate F tests were not significant for any of the seven scales: MDP Success Potential F(1,428) = 0.02 (p = .90), In-service Professional Development F(1,428) = 0.16 (p = .69), Policing as a Profession F(1,428) = 0.11 (p = .74), Student Support F(1,428) = 0.03 (p = .86), Clinical Program Delivery F(1,428) = 0.06 (p = .81), Emotional Support F(1,428) = 0.03 (p = .86), and Officer Staff-Member Discourse F(1,428) = 0.21 (p = .65).

Effect sizes using Cohen's (1977) d which is the difference between group means per full sample standard deviation were computed. These effect sizes ranged from 0.02 for the comparison of MDP Success Potential of female officers with male officers to 0.48 for the comparison of In-service Professional Development of female officers with male officers (M = 0.10, SD = 0.17). Overall, these effect sizes are very small. Figure 6.1 shows mean scale scores for male and female officers. The results shown in Figure 6.1 confirm the view that there were no significant gender differences on any scales.

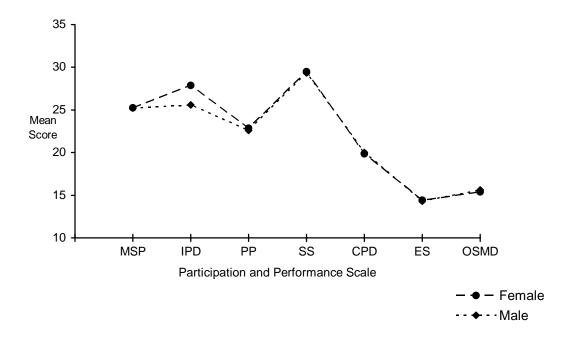


Figure 6.1 Mean Scores for Seven Participation and Performance Scales According to Gender (N = 475 officers)

6.2.2 What is the Effect of Age on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of age of officers (viz. age groups 21-30, 31-40, 41-50 and 51-60) on the seven scales assessing the influence on participation and performance of officers in the MDP, a one-way MANOVA with the seven scales as dependent variables and age as the grouping variable was performed on the data. Wilks' λ criterion for this test (0.934) was not statistically significant (p = .55).

Univariate F tests were not significant for any of the seven scales: MDP Success Potential F(3,426) = 1.04 (p = .38), In-service Professional Development F(3,426) = 0.85 (p = .47), Policing as a Profession F(3,426) = 0.60 (p = .61), Student Support F(3,426) = 1.37 (p = .47)

.25), Clinical Program Delivery F(3,426) = 0.83 (p = .48), Emotional Support F(3,426) = 0.76 (p = .52), and Officer Staff-Member Discourse F(3,426) = 1.42 (p = .24).

Effect sizes using Cohen's (1977) d ranged from 0.00 for the comparison of In-service Professional Development of officers aged 31-40 with officers aged 51-60 to 0.57 for the comparison of Student Support of officers aged 21-30 with officers aged 51-60 (M = 0.23, SD = 0.15). These effect sizes were generally small. The graphs shown in Figure 6.2 show a consistent pattern of results. For all scales, officers aged 51 - 60 scored more positively than did their younger counterparts.

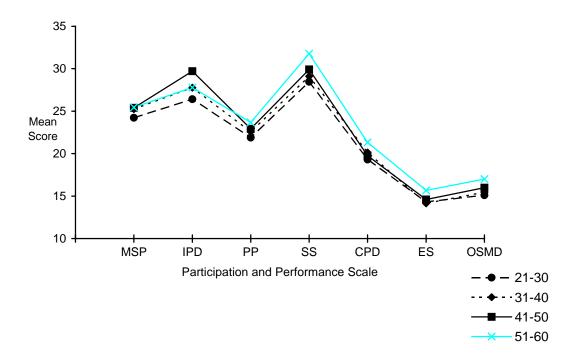


Figure 6.2 Mean Scores for Seven Participation and Performance Scales According to Age (N = 475 officers)

6.2.3 What is the Effect of Dependent Children on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of dependent children (viz. whether officers assumed responsibility for children or not) on the seven scales assessing the influences on participation and performance in the MDP, a one-way MANOVA with the seven scales as dependent variables and dependent children as the grouping variable was performed on the data. Wilks' λ criterion for this test (1.12) was not statistically significant (p = .37). Univariate F tests were significant for only two of the seven scales, viz. Clinical Program Delivery F(1,427) = 6.96 (p < .01), and Emotional Support F(1,427) = 9.24 (p < .01).

Effect sizes using Cohen's (1977) d ranged from 0.09 for the comparison of Policing as a Profession of officers with dependent children with officers without dependent to 0.33 for the comparison of Emotional Support of officers with dependent children with officers without dependent children (M = 0.20, SD = 0.09). Overall, these effect sizes are small. Figure 6.3 shows mean scale scores for these comparisons. Clearly, officers with dependent children scored higher than those officers without dependent children.

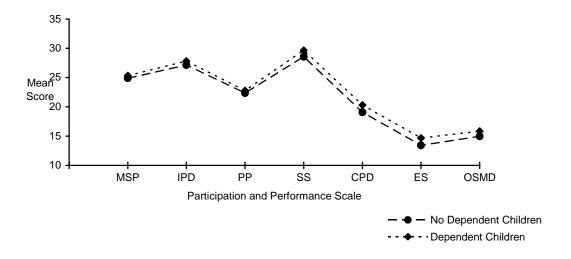


Figure 6.3 Mean Scores for Seven Participation and Performance Scales According to Dependent Children (N = 475 officers)

6.2.4 What is the Effect of Current Rank on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of rank (viz. senior constable, sergeant and senior sergeant) on the seven scales assessing the influences on participation and performance in MDP, a one-way MANOVA with the seven scales as dependent variables and rank as the grouping variable was performed on the data. Wilks' λ criterion for this test (5.82) was statistically significant (p<.001).

Univariate F tests were significant for all seven scales: MDP Success Potential F(2, 427) = 10.30 (p < .001), In-service Professional Development F(2,427) = 27.84 (p < .001), Policing as a Profession F(2,427) = 23.63 (p < .001), Student Support F(2,427) = 10.50 (p < .001), Clinical Program Delivery F(2,427) = 7.15 (p < .001), Emotional Support F(2,427) = 16.31 (p < .001), and Officer Staff-Member Discourse F(2,427) = 18.59 (p < .001).

To establish which pairs of ranks have significantly different scale scores, Tukey's HSD post-hoc procedure with a significance level of .05 was employed. For all seven scales, significant differences in scale scores were found between senior constables and senior sergeants. Also, scores on three scales (viz. MDP Success Potential, In-service Professional Development, and Policing as a Profession) for senior constables and sergeants differed significantly. Significant differences between scale scores for In-service Professional Development, Policing as a Profession, Student Support, Clinical Program Delivery, Emotional Support and Officer Staff-Member Discourse were recorded for post-hoc comparisons of sergeant and senior sergeant. In fact, 16 of the 21 post-hoc comparisons were statistically significant (p<.05).

Effect sizes using Cohen's (1977) d ranged from 0.13 for the comparison of Officer Staff-Member Discourse of senior constables and sergeants to 0.88 for the comparison of Inservice Professional Development senior constables with senior sergeants (M = 0.45, SD = 0.45).

0.21). Overall, these effect sizes are moderate. Figure 6.4 shows mean scale scores for senior constables, sergeants and senior sergeants. One noteworthy feature of Figure 6.4 is the consistent pattern of these mean scores. For all seven scales, mean scale scores for senior sergeants were above mean scale scores for sergeants. Similarly, means scores were above corresponding mean scales scores for senior constables.

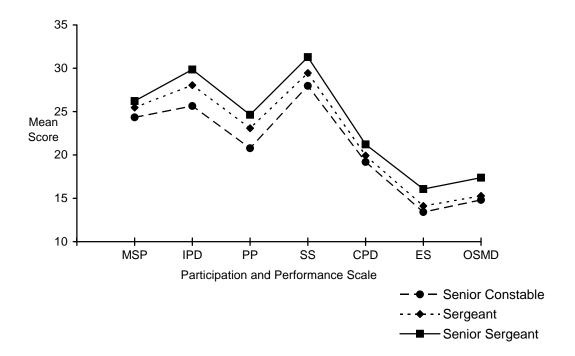


Figure 6.4 Mean Scores for Seven Participation and Performance Scales According to Rank (N = 475 officers)

6.2.5 What is the Effect of Type of Duty Performed on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of type of duty performed (viz. Uniform General Duty, Plain Clothes, Administration/Managerial or Specialist) on the seven scales assessing the influences on participation and performance in the MDP, a one-way MANOVA with the seven scales as dependent variables and type of duty performed as the grouping variable was performed on the data. Wilks' λ criterion for this test (2.0) was statistically significant (p<.01).

Univariate F tests were significant for all seven scales: MDP Success Potential F (3,426) = 3.12 (p<.05), In-service Professional Development F(3,426) = 6.65 (p<.001), Policing as a Profession F(3,426) = 6.19 (p<.001), Student Support F (3,426) = 5.85 (p<.001), Clinical Program Delivery F(3,426) = 4.21 (p<.01), Emotional Support F(3,426) = 6.82 (p<.001) and Officer Staff-Member Discourse F(3,426) = 5.64 (p<.001).

To establish which pairs of type of duty performed have significantly different scale scores, Tukey's HSD post-hoc procedure with a significance level of 0.05 was employed. For all seven scales, significant differences in scale scores were found between Uniform General Duty and Administration/Managerial. Also, scores on three scales (viz. In-service Professional Development, Policing as a Profession, and Student Support) for Plain Clothes and Administration/Managerial differed significantly. Finally, mean scores for Emotional Support and Officer-Staff Member Discourse differed significantly between those in the Uniform General Duty group and officers who performed Specialist Duties. No other post-hoc comparisons between scale scores were statistically significant.

Effect sizes using Cohen's (1977) d ranged from 0.04 for the comparison of Policing as a Profession of Uniform General Duty with Plain Clothes to 0.82 for the comparison of MDP Success Potential of Uniform General Duty with Plain Clothes (M = 0.32, SD = 0.18).

Overall, these effect sizes are low to moderate. The graphs of Figure 6.5 reveal that, apart from the MDP Success Potential scale, officers with Administration/Managerial duties held more positive perceptions than did other officers.

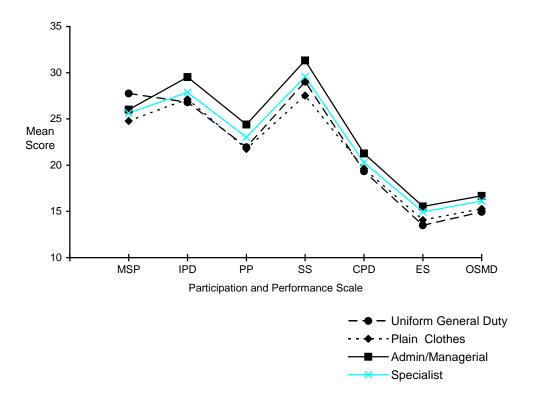


Figure 6.5 Mean Scores for Seven Participation and Performance Scales According to Duty (N = 475 officers)

6.2.6 What is the Effect of Highest Educational Level Attained on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of highest qualification attained (viz. Completed Secondary School, TAFE Diploma, Partially-completed Bachelor Degree, Completed Bachelor Degree or Postgraduate – partial or completed) on the seven scales assessing the influences on

participation and performance in the MDP, a one-way MANOVA with the seven scales as dependent variables and highest qualifications attained as the grouping variable was performed on the data. Wilks' λ criterion for this test (3.33) was statistically significant (p<.001).

Univariate F tests were significant for only three of the seven scales: MDP Success Potential F(4,425) = 9.89 (p < .001), In-service Professional Development F(4,425) = 7.54 (p < .001), and Clinical Program Delivery F(4,425) = 7.97 (p < .001).

To establish which pairs of qualifications attained have significantly different scale scores, Tukey's HSD post-hoc procedure with a significance level of 0.05 was employed. Significant differences in scale scores were found between completed Secondary School and completed Bachelor's Degree for three of the seven scales, viz. MDP Success Potential (p<.001), In-service Professional Development (p<.01), and Clinical Program Delivery (p<.001). Also, significant differences in scale scores were found between completed Secondary School and officers who were undertaking or had completed postgraduate qualifications on the same three scales, viz. MDP Success Potential (p<.001), In-service Professional Development (p<.001), and Clinical Program Delivery (p<.01).

Effect sizes using Cohen's (1977) d ranged from 0.01 for the comparison of Policing as a Profession of Completed Secondary School and TAFE Diploma to 0.78 for the comparison of MDP Success Potential and Completed Secondary School with Completed Bachelor Degree (M = 0.28, SD = 0.23). Overall these effect sizes are small to moderate. Figure 6.6 shows mean scale scores for these comparisons. Clearly, officers with higher academic qualifications (viz. completed Bachelor's degree and partial or completed postgraduate qualifications) scored higher than did officers with lower level qualifications. Figure 6.6 reveals a distinct hierarchical pattern. Officers with higher qualifications held more positive perceptions than other officers.

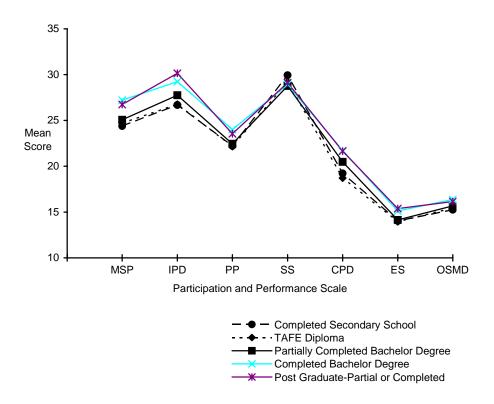


Figure 6.6 Mean Scores for Seven Participation and Performance Scales According to Highest Qualification (N = 475 officers)

6.2.7 What is the Effect of Geographic Remoteness on Factors Influencing Participation and Performance of Officers Enrolled in the MDP?

To investigate the effect of geographic remoteness (viz. Region 1 - Headquarters, Metropolitan North and Metropolitan South, Region 2 – North Coast, South Coast, South-Eastern, Region 3 – Central, and Region 4 – Northern and Far Northern) on the seven scales assessing the influences on participation and performance in the MDP, a one-way MANOVA with the seven scales as dependent variables and geographic location as the grouping variable was performed on the data. Wilks' λ criterion for this test (1.87) was statistically significant (p<.01). Univariate F tests were significant for only one of the seven scales, viz. Emotional Support F(3,426) = 3.19 (p<.05). To establish which pairs of

geographic locations have significantly different scale scores, Tukey's HSD post-hoc procedure with a significance level of .05 was employed. No significant differences in scale scores were found between any geographic location and any of the other geographic locations for each of the seven scales.

Effect sizes using Cohen's (1977) d ranged from 0.00 for the comparison of In-service Professional Development of Headquarters/Metropolitan North/Metropolitan South with Far Northern/Northern to 0.71 for the comparison of Student Support Central Region with Far Northern/Northern (M = 0.23, SD = 0.18). Overall, these effect sizes are low. The results shown in Figure 6.7 indicate that apart from Officer-Staff Member Discourse, officers in Central Queensland held the lowest mean scores for all scales.

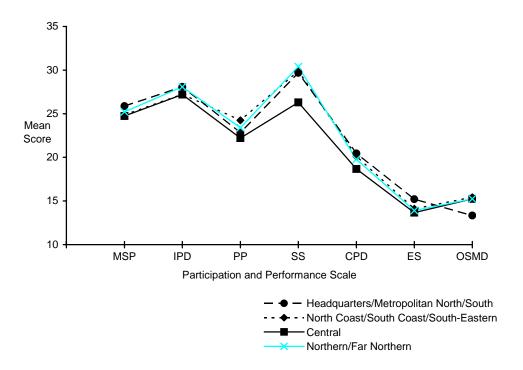


Figure 6.7 Mean Scores for Seven Participation and Performance Scales According to Geographic Remoteness (N = 475 officers)

6.3 CAN A MODEL THAT PROVIDES A COMPREHENSIVE REPRESENTATION OF THE RELATIONSHIPS AMONG AN OFFICER'S CHARACTERISTICS AND THE FACTORS THAT INFLUENCE PARTICIPATION AND PERFORMANCE IN THE MDP BE DEVELOPED?

This section answers Research Question 4: Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed?

As outlined in Section 3.3.5 of the methodology chapter of this thesis, this question required techniques that allow for the simultaneous analysis of data that relate six grouping variables of this study (viz. Gender, Age Group, Highest Qualification, Rank, Dependent Children, and Geographical Remoteness) and the seven scales that reflect on the delivery of the MDP (Clinical Program Delivery, Student Support, Officer-Staff Member Discourse, Emotional Support, In-service Professional Development, Policing as a Profession, and MDP Success Potential). A two-stage process employing Principal Components Factor Analysis (PCFA) and Structural Equation Modelling (SEM) was used to investigate this question. For each scale, a PCFA was performed for that scale's items only. Additionally, each of these analyses provided factor score coefficients to be used in generating composite scale scores from items. For all seven scales, one factor with an eigenvalue above unity was obtained. The proportions of variance accounted for by each factor in these analyses were: Student Support, 39.22%; Clinical Program Delivery, 51.40%; Officer-Staff Member Discourse, 65.00%; Emotional Support, 68.73%; MDP Success Potential, 33.08%; Inservice Professional Development, 37.28%; Policing as a Profession, 46.96%. Table 6.2 shows path coefficients for the path linking each latent variable with its observed variable. Table 6.2 also shows the error variance for each observed variable. These values were computed using the formulae $\lambda = \sqrt{r}$ and $\theta = 1 - r$ where r is the scales reliability. By fixing these variables, the number of parameters to be estimated by LISREL in the second stage of these analyses was reduced which assisted LISREL in establishing good model fit to the observed data.

TABLE 6.2 PATH COEFFICIENTS AND ERROR VARIANCES FOR SEVEN MDP EVALUATION SCALES

Scale	Path coefficient λ (\sqrt{r})	Error Variance $\theta = (1 - r)$
Student Support	.89	.20
Clinical Program Delivery	.89	.20
Officer-Staff Member Discourse	.93	.14
Emotional Support	.94	.12
MDP Success Potential	.80	.36
In-service Professional Development	.86	.26
Policing as a Profession	.90	.19

Based on a review of the MANOVA results reported in previous sections of this chapter and scale-scale inter-correlations and an intuitive understanding of the theoretical constructs under investigation, an initial or *postulated* model was developed.

The model hypothesises that MDP Success Potential is influenced by all other variables either directly or indirectly. For example, it is hypothesised that Rank has a direct effect on MSP Success Potential and an indirect effect on In-Service Success Potential via 6 mediating variables: Policing as a Profession, In-service Professional Development, Clinical Program Delivery, Student Support, Officer-Staff Member Discourse, and Emotional Support. The variables shown in Figure 1 can be assigned to 4 groups: observed variables (Highest Qualification, Rank, Dependent Children, and Geographical Remoteness), mediating latent variables that relate to program delivery (Clinical Program Delivery, Student Support, Officer-Staff Member Discourse, and Emotional Support), contextual latent variables that relate to professionalisation of the police service (Policing as a Profession, and In-service Professional Development) and the final latent variable (MDP Success Potential). Of the 25 paths shown in Figure 6.8, 14 were based on MANOVA results (black paths). It should be noted that Figure 6.8 does not include observed composite variables associated with each latent variable, paths linking scale latent variables to their observed composite variables for each scale and error variances for these observed variables.

Figure 6.8 shows this structural model with four grouping (or observed) variables in rectangles and the seven scales in ellipses. Gender and Age Group were omitted from the model because MANOVAs investigating their effects were not significant (see Sections 6.4.1 and 6.4.2).

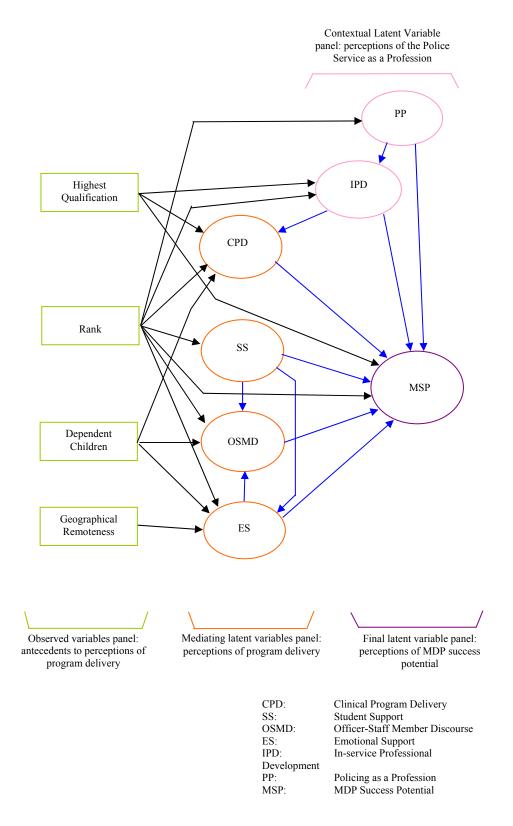


Figure 6.8 Postulated Model for MDP Success Potential

When conducting SEM it is important to consider the categories for each grouping variable. For the four grouping variables used in the present analyses, there was a clear logic to their respective categories. These categories were used to report findings in previous sections of this chapter and their logic is important for the interpretation of SEM results. For Rank, there were three categories: senior constable, sergeant and senior sergeant. These were scored 2, 3, and 4 respectively. There is a clear ordering with higher rank having a higher score. A positive path coefficient for a path between Rank and a scale (e.g. Policing as a Profession) would indicate that, in general, higher ranks are associated with higher scale scores. Dependent Children was scored No = 1 and Yes = 2. The Highest Qualification variable was scored 1 = Completed secondary school, 2 = TAFE Diploma, 3 = Partially completed Bachelor degree, 4 = Completed Bachelor degree and 5 = Postgraduate – partial or completed. Geographical Remoteness was scored in terms of remoteness from Brisbane: Headquarters and Metropolitan North and Metropolitan South = 1, North Coast, South Coast and South-Eastern = 2, Central Queensland = 3, and Northern and Far Northern = 4. As indicated in Chapter 3 (Section 3.3.5), Duty was not included in these analyses because no clear ordering or hierarchy of duties could be easily identified. SEM analyses conducted with such variables are impossible to interpret.

The LISREL analysis of the postulated model shown in Figure 6.8 revealed only a fair fit to the data (see Table 6.3) with an RMSEA value of .11 which is above the accepted upper limit of 0.08 (Byrne, 1999). Additionally the χ^2 /df ratio of 6.75 is too high. Fit indices provided with the LISREL output suggested that better fit might be achieved if three extra paths were added to the model (see Table 6.3). The fit indices shown in Table 6.3 were improved in this second model with a statistically significant reduction in χ^2 [($\Delta\chi^2$ (3, N = 246) = 106.89, p <.001]. The RMSEA was much improved at 0.04 and the χ^2 /df ratio was reduced to 1.94. The Tucker-Lewis Index (TLI) was 0.99 – an excellent model fit.

TABLE 6.3 SUMMARY OF SPECIFICATIONS AND FIT STATISTICS FOR TESTED MODELS MDP SUCCESS POTENTIAL

Model	Actions	χ^2	df	$\Delta\chi^2$	Δdf	RMSEA	TLI	PNFI
1 (Postulated)	-	141.81	21	-	-	.11	.94	.35
2	Path added: Student Support → Clinical Program Delivery Path added: Officer-Staff Member Discourse → Clinical Program Delivery Path added: Emotional Support → Clinical Program Delivery.	34.92	18	106.89*	3	.05	.99	.33
3 (Final)	Seven non-significant paths deleted from the model: Rank → MDP Success Potential Rank → Policing as a Profession Rank → Emotional Support Student Support → Clinical Program Delivery Officer-Staff Member Discourse → Clinical Program Delivery Dependent Children → Clinical Program Delivery Highest Qualification → Inservice Professional Development Dependent Children → Officer-Staff Member Discourse	44.30	25	9.38	7	.04	.99	.44

^{*} p<.001

In a second set of modifications, it was decided to remove paths for which non-significant path coefficients were evident (i.e. t tests investigating whether the path coefficients differed from zero were not statistically significant at p<.05). The purpose of these adjustments was to provide a high level of parsimony to the model. As shown in Table 6.3, seven paths were deleted from the model. These modifications resulted in an increase in the χ^2 statistic from 34.92 to 44.30 but no adverse effects on fit statistics were recorded. In fact, the RSMEA was reduced slightly to 0.04 and the χ^2 /df ratio was reduced to 1.77 (see Table 6.3). These modifications simplified the structural model to 4 observed variables, 7 latent variables and 21 paths (see Figure 6.9).

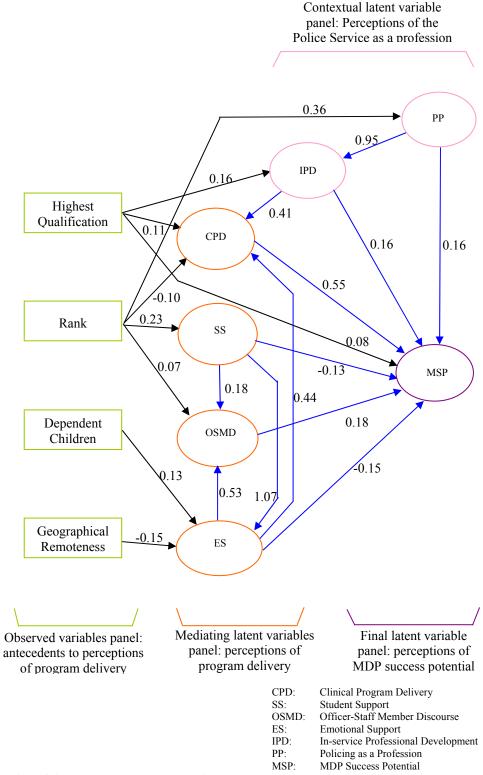


Figure 6.9 Final Model for MDP Success Potential

Structural components of this model with standardised path coefficients are shown in Figure 6.9. All 21 path coefficients were statistically significantly different from zero (p <.05). The strength and direction of the statistically significant coefficients can be interpreted from Figure 6.9. For example, Highest Qualification was a positive direct predictor of In-service Professional Development (β = 0.16), Clinical Program Delivery (β = 0.11), and MDP Success Potential (β = 0.08). Additionally, Highest Qualification had positive indirect effects on MDP Success Potential via Clinical Program Delivery (β = 0.11 and β =0.55) and In-service Professional Development (β = 0.16 and β =0.16).

Rank had positive effects on Student Support (β = 0.23), Policing as a Profession (β = 0.36) and Officer-Staff Member Discourse (β = 0.07) but a negative effect on Clinical Program Delivery (β = -0.10). That is, higher ranked officers reported higher levels of Student Support, Policing as a Profession, and Officer-Staff Member Discourse but lower levels of Clinical Program Delivery. Policing as a Profession had a potent positive effect on Inservice Professional Development (β = 0.95) which, in turn, had a subsequent effect on MDP Success Potential (β = 0.16). While Dependent Children had no significant direct effect on MDP Success Potential, it had indirect effects via Emotional Support (β = 0.13 and β = -0.15) and also via Emotional Support and Officer-Staff Member Discourse (β = 0.13, β = 0.53, and β = 0.18). Similarly, Geographical Remoteness had only indirect effects on MDP Success Potential via Emotional Support (β = -0.15 and β = -0.15) and also via Emotional Support and Officer-Staff Member Discourse (β = -0.15, β = 0.53, and β = 0.18).

The coefficient of determination for this model was computed to be .307. That is 30.7% of variance in the seven latent variables was explained by the set of four observed grouping variables. Overall, Figure 6.9 provides a comprehensive structural model for MDP Success Potential based on the data collected in the present study.

6.4 CONCLUSION

This chapter has reported on the data analysis for the second phase of this study that was based on a quantitative research method. A questionnaire was used and an analysis of the data collected from the 475 officers who responded was used to answer Research Questions 3 and 4. Research question 3 asked: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the Management Development Program? Seven sub-questions of Research Question 3 investigated the effects of gender, age, dependent children, current rank, type of duty performed, highest educational level attained, and geographic remoteness in relation to an officer's location within Queensland on the factors influencing participation and performance in the Management Development Program.

These analyses involved one-way MANOVAs that were conducted with the seven scales (viz. In-Service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support) as dependent variables and each of the independent variables as the grouping variable. Wilks' λ results for each test have been presented. Results of univariate F tests have also been provided. Effect sizes using Cohen's (1977) d have been provided together with figures illustrating mean scale scores for each grouping variable. Information presented illustrates that Research Question 3 has been successfully answered through the evidence provided about officers' characteristics and the factors that influence participation and performance in the MDP.

Research Question 4 asked if a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP could be developed? This question required techniques that allowed for the simultaneous analysis of data that related to six grouping variables (viz. Gender, Age, Highest Qualification, Rank, Dependent Children and Geographic Remoteness) and the seven scales that reflected on the delivery of the MDP (MDP Success Potential, In-service Professional Development, Policing as a Profession, Student Support,

Clinical Program Delivery, Emotional Support and Officer-Staff Member Discourse). Details about the two-stage process that employed PCFA and SEM that were used to investigate this question have been provided. Stages in the development of the final model have been provided including the initial or postulated model as detailed in Figure 6.8. Reasons for the modifications made to Figure 6.9 have been included and the final model with 4 observed variables, 7 latent variables and 21 paths has been illustrated in Figure 6.9. An analysis of the model has been provided and it is clear that it is a comprehensive structural model for MDP Success Potential based on the data collected in the present study. Information provided in this chapter clearly illustrates that Research Question 4 has been answered. A model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP has been developed.

Apart from the specific results reported in the present chapter the questionnaire results provided a basis for the third phase of data collection undertaken for this thesis. This third phase was based on two interviews and is the focus of the following chapter.

CHAPTER 7

RESULTS OF PHASE 3 OF STUDY

7.1 INTRODUCTION

This chapter reports the third phase of data collection for this study and focuses on Research Question 5: What are the implications of the study for enhancing the delivery of the Management Development Program? Data were collected for this phase through interviews conducted with the manager of the MDP and the head of the School of Management. An analysis of the questionnaire data reported in the previous chapter formed the basis for the semi-structured interview schedule used.

Section 7.2 provides the results from the two semi-structured interviews with the manager of the MDP and the head of the School of Management. The interview schedule was developed from the results of the questionnaire used as Phase 2 of this study. Section 7.2.1 relates to the scale In-Service Professional Development, Section 7.2.2 to Policing as a Profession and 7.2.3 to MDP Success Potential. Data in relation to Student Support are reported in Section 7.2.4 and to Clinical Program Delivery in Section 7.2.5. Section 7.2.6 reports results of the scale Officer Staff-Member Discourse and Section 7.2.7 relates to Emotional Support. A conclusion to Chapter 7 is provided in Section 7.3.

Figure 7.1 illustrates the steps followed in the data analysis of the two semi-structured interviews conducted during this phase of the study. As shown in Figure 7.1, the data collection process involved semi-structured interviews with the manager of the MDP and the head of the School of Management. These two members of the management team were interviewed because they were in a position to implement changes to the delivery of the program, and to seek funding for resources that would enhance the delivery of the program. An interview schedule was derived from an analysis of Phase 2 questionnaire data collected

from 475 officers of the QPS who had completed at least one unit of the Management Development Program.

The interview schedule was based on the seven scales that formed the questionnaire:

- In-service Professional Development
- Policing as a Profession
- MDP Success Potential
- Student Support
- Clinical Program Delivery
- Officer-Staff Member Discourse
- Emotional Support

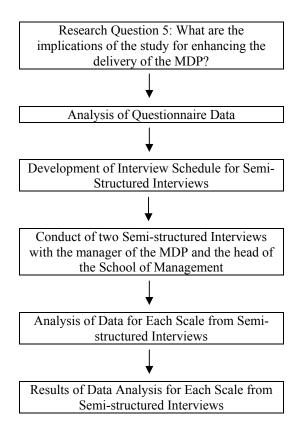


Figure 7.1 Steps in Qualitative Data Analysis

Percentage responses for each of the items on the Likert scale were calculated for each questionnaire item for each respondent. These responses were considered for each of the seven scales and the interview schedule was developed using each of the seven scales as a basis. Details of questions, responses, the analysis of data and results that focussed on implications of the study for enhancing the delivery of the MDP for each scale have been provided in Sections 7.2.1 - 7.2.7.

Both interviews were conducted and transcribed by the researcher, and a copy of the transcripts was provided for the manager of the program and the head of the School of Management to verify that their perceptions as transcribed were valid. Each transcript was analysed to identify the salient themes. A copy of the two interviews for Phase 3 is in Appendix F.

7.2 RESULTS OF TWO SEMI-STRUCTURED INTERVIEWS

This third phase of data collection was designed to address the implications of the study for enhancing the delivery of the MDP. As indicated, officers' responses to the questionnaire were considered collectively and used as a basis for the conduct of these interviews.

7.2.1. In-service Professional Development

Three questions were included about In-service Professional Development and each question was derived directly from an analysis of the data collected during Phase 2 of this study.

Question 1: A significant number of officers agree that professional development is important, but equally significant numbers of officers stated that they only undertook study of MDP because it was compulsory for promotion. What impact do you see this having on the performance of officers who undertake the program?

Responses indicated that committed officers applied themselves well to the learning offered, and those who were not committed did not gain any real learning outcomes. A reason cited was because this latter group of officers placed emphasis on gaining promotion, and not learning through professional development. A further response was "Anyone who has tried to improve their career by undertaking education has been viewed as not a very good operational police officer and with more leanings toward academia, and therefore they are not suited." An additional comment was "There has been a gradual change over the years and those people who have completed management studies do not openly talk about their completion rates or their study for fear of victimization, harassment or not fitting in with the culture of being a good police officer."

Question 2: Very few officers believe that senior officers appreciate the benefits of management education or that senior members of the QPS support their study of MDP. Why do you believe officers have such perceptions?

Responses centred on the fact that senior officers did not generally support the MDP and this was because many senior officers supported a *command and control* philosophy of management, even in non-incident command situations. A *command and control* philosophy was in direct contrast to the participative decision making approach that was promoted through study of the MDP. A further comment was, "*Senior officers don't understand what the MDP delivers*."

Question 3: Just under half of those who responded believe that undertaking MDP would assist their professional development as a manager and only a similar number believe that MDP would assist their career development. What impact does this have for the delivery of the program?

Responses indicated that officers generally did not believe that undertaking the MDP would assist their career development, and that many officers did not appreciate the importance of management knowledge to their career development. Further, many officers did not appreciate what was required as a senior manager of the service. As well, the perception

was that the QPS did not generally reward people for being good managers, and if there was a reward system that supported those officers who successfully completed the MDP by giving them formal recognition, there would be more recognition of the importance of management education, and officers would benefit through career progression.

It was clear not all officers valued the learning offered through professional development, not all officers valued the importance of management education and many officers did not believe that the MDP would assist their career development. Implications for the enhancement of the MDP involved ensuring the content of the material delivered was appropriate and relevant to policing, and the management theory presented was relevant to the positions for which the officers would apply when seeking promotion. A further implication was for the QPS to assist officers to understand the need to develop a sound career plan. An additional implication was to encourage members of the service to promote the importance of in-service professional development.

7.2.2 Policing as a Profession

Question 1: Significantly high numbers of respondents believe that management education for officers is important if the QPS is to improve as an organization and that education of officers is essential if the service is to improve its level of community service. Few respondents, however, believe the QPS has helped them to understand the need for continuous education and professional development such as MDP, and few believe the QPS as an organization has helped them to understand the importance of an officer having management knowledge and skills. What is the significance of this, in your opinion, for the management of the program?

Responses to the issues raised about policing as a profession focussed on the content of the material, the need for professional development and the marketing of benefits of the program. With regard to curriculum content, respondents believed there was a need to ensure the content of the program had a sound theoretical basis and that there was sound

application of theory in relation to positions officers would apply for in the future. An implication for enhancing the delivery of the MDP was that curriculum development should be based on sound research conducted with officers of the service to ensure the theory related to the tasks and roles of officers at the respective ranks for which the officers were being prepared.

With regard to the need for professional development, it was believed that "Life-long learning has to be part of the organizational culture." Further, "There are some who understand the importance of management education, but it is not generally supported either up or down." Because the QPS had a focus of improved client service delivery, respondents considered it important for managers and supervisors at all levels to have a sound understanding of management theory. Further "The service must acknowledge that those skills an officer has as an operational police officer are not necessarily the skills they need as a senior manager in the organization, and that the MDP is one program that provides a very good basis for the development of managers." An implication for the MDP was to promote the ethos of continuing professional development.

To market the benefits of the program, respondents believed senior officers of the service needed to promote the MDP in workplaces, as it was believed "That is particularly important in an organization like the QPS which is rank-structured where a lot of importance is placed on the opinion of senior officers of a higher rank." An implication for the MDP was to target senior officers to ensure they understood the benefits the program could offer to individual officers, as well as the service, and could communicate such benefits to those they supervised in workplaces.

Responses indicated there was a need for the content of the MDP to be relevant, for the importance of professional development to be promoted to all officers and that senior officers should promote the importance of the MDP.

7.2.3 MDP Success Potential

Question 1: Because an officer's ability to cope with the academic requirements was a serious issue for the MDP, the question for this scale was: High numbers of respondents believed that before they enrolled in MDP they would have benefited from assistance with how to interpret an assignment topic. Why do you believe officers responded in this way and how can such officers be assisted?

An analysis of responses indicated that because many officers lacked qualification at undergraduate degree level, and lacked academic experience generally, this impacted significantly on their ability to cope well with the postgraduate level at which the MDP was offered. As one respondent said "Much police training has a practical basis where they are observed demonstrating skills, and the ones who do not have a tertiary background, they have a limited background in knowing what the key issues are." This belief was further substantiated by "I think it is because they don't have the foundation to support what they are being asked to do." A further observation was that while many officers lacked the experience of academic study, they had knowledge and skills they used to analyse complex criminal and operational matters, but were not able to apply the same thought processes when analysing assignment topics.

Additional reasons related to fear of failure, and some officers were not prepared to acknowledge they had a problem with academic reading and writing. As one respondent said "They don't like to ring people in the workplace because it is an acknowledgement that they may be weaker than their colleagues, and be held up to ridicule." An implication for enhancing the delivery of the program was to ensure that the additional learning support needed by officers was provided.

Factors that impacted on some officers' potential to succeed within MDP included lack of qualifications at undergraduate level, fear of failure and unwillingness to seek assistance with academic processes.

7.2.4 Student Support

Questions in relation to this scale focussed on the provision of orientations, telephone tutorials, face-to-face tutorials, assignment-writing workshops, the attitude of facilitators and feedback provided by facilitators on assessment items. Responses to specific questions have been addressed individually.

Question 1: Approximately half of the respondents said they would attend an orientation program for MDP in their workplace and less than half said they would participate in teletutorials if they were offered. Why do you believe such lack of interest exists?

Responses indicated that the lack of interest resulted from the fact that many officers undertook the program simply because it was a requirement if they wanted to be eligible for promotion, and many did not have a genuine interest in undertaking the study. Further, many officers did not see the study as relevant and assisting them to perform their role more effectively. Responses also indicated that non-attendance at orientations or telephone tutorials was reflective of the attitude to undertaking the education. Other reasons given were that operational police were "busy" and they would have to attend in out-of-work hours, and many officers would find this unacceptable. Further, officers who attended as a group "might feel they are going to be ridiculed by colleagues if they were to ask for more information."

Question 2: About 60% of respondents said they would benefit from tutorials conducted at their workplaces and a similar number said they would attend an assignment-writing workshop in their workplace. Are these levels of responses significant for the delivery of the program in your opinion?

Responses to this question focussed on the importance of the client service delivery aspects of the MDP and the need to address the budget implications for delivering such services. Responses confirmed the need for the provision for such support services as part of the delivery strategies for the program.

Question 3: About 59% of respondents believe that MDP staff members have a positive attitude to providing assistance to officers and only 35% believe MDP staff members have contributed to their success with MDP. Can you see implications for the delivery of the program from these data?

Responses indicated that staff members have to be more proactive in their teaching role. An implication for enhancing the delivery of the program was to assist facilitators to be proactive in offering support to officers. This was especially pertinent for those facilitators who were police officers who did not have a substantial background in management and educational qualifications. An additional implication for the program was the need to provide an effective induction program and to mentor all facilitators when they were appointed to the program.

Question 4: Only 31% of respondents believed that feedback received on assignments assisted their learning about management. Can you suggest a reason for this?

Data revealed the reason was because many facilitators did not possess formal qualification in management. Because some facilitators lacked the qualification, they also lacked the knowledge and understanding of management theory, and as a consequence the professional confidence to clearly articulate issues that related to management and the application of management theory. Some facilitators focussed on areas such as the process of writing the assignment and the construction of the assignment, as opposed to the theory of management. An additional issue arose with unqualified facilitators because they lacked experience and qualification in management, and some facilitators were unable to determine whether the officers were showing genuine understanding of management principles. An implication for the delivery of the MDP was to provide professional development for facilitators, and to ensure that qualification in management was a mandatory requirement for those employed within the program.

Issues of significance in relation to Student Support focussed on the fact that many officers only undertook the study because it was a requirement if they chose to be eligible for

promotion and many officers did not appreciate the relevance of management education. Client service aspects of delivery such as the conduct of tutorials were deemed important and staff members must demonstrate a proactive approach to teaching. Further it was considered imperative that all staff members possess appropriate qualifications.

7.2.5 Clinical Program Delivery

Two issues of significance for the clinical delivery of the program were the learning guides and materials distributed to officers, and the distance education mode of delivery.

Question 1: Approximately half of the respondents stated they found the learning guides easy to follow and that MDP materials were easy to follow. What impact could such data have on the performance of officers who undertake the program?

Responses indicated a need for learning guides and materials to be easy to follow so that officers would attempt to read the material. Respondents believed that by providing material in a user-friendly format, the fear of academic study would be reduced, and officers would be encouraged to actively engage in learning about management.

Question 2: Just over half the respondents believe distance education is a convenient way for them to study. If officers do not like to study in this mode, could this be significant for the service with regard to participation and performance of officers?

Responses indicated that many officers could not accommodate to study in the distance education mode and this was a contributing factor to an officer's decision to terminate enrolment in the program. An implication for the delivery of the program was to support officers to assist them to cope with learning in the distance education mode.

Significant issues for Clinical Program Delivery were ensuring learning materials and program content of the MDP were designed for ease of reading and that appropriate support was provided for officers who were required to learn in the distance education mode.

7.2.6 Officer-Staff Member Discourse

Elements of significance in relation to Officer-Staff Member Discourse are reflected in the following question.

Question 1: Approximately one-third of respondents believed they were encouraged to discuss with MDP staff how they learnt about management; how they thought when they learnt about management; could discuss different ways of learning about management; and could discuss how well they were learning about management. What implications do you believe this has for the role of MDP staff?

Responses about implications for facilitators centred on the need for facilitators to have the management and educational background required to enable them to discuss issues of this nature with the officers. The impact of the police culture was raised because many officers at the various ranks were facilitators and "Officers will always be very careful what they say to another officer, and because of the cultural issues, many officers will not discuss those sorts of issues with facilitators who are police officers." This respondent believed that officers would discuss such issues with facilitators who were not police officers. Respondents believed that facilitators needed to understand that discussing such issues was their professional responsibility in addition to delivering materials, answering questions and marking and returning assignments in a timely way. Facilitators needed to consider the underlying educational issues involved in facilitating a unit of work. The need for professional development for facilitators was seen as an important implication for enhanced officer-staff member discourse.

Issues of significance for Officer-Staff Member Discourse focussed on the need for qualifications of staff member who facilitated within the MDP, the implications of employment of police officers as staff members, the importance of staff members having a clear understanding of their role as facilitators and the need for provision of professional development for staff members.

7.2.7 Emotional Support

Issues related to emotional support for officers enrolled in the MDP were reflected in the following questions.

Question 1: A total of 34% of respondents believe that within MDP officers are treated fairly; 24% believe that officers' efforts are valued; 20% believe that their ideas are respected; 18% believe that their individual differences are respected and 18% believe officers' suggestions are appreciated. How could these levels of emotional support be raised in your opinion?

Key responses to how the low response rates for these aspects of emotional support could be raised related to the need for facilitators to understand educational theory as it applied to emotional support, and that development of this could be achieved to some extent through professional development. One respondent believed that facilitators needed a sound understanding of the role of a police officer so they could relate well to officers when providing management education.

Question 2: Approximately half of all respondents recorded undecided for these five questions. Can you suggest a reason for this?

Of greater significance were the responses to Question 2 because approximately half of those officers who completed the questionnaire recorded *undecided* as a response. Reasons cited for this related to the culture of the QPS, such as the following quote "The whole culture of the QPS does not encourage these sorts of issues to be discussed." Further "I do think the whole cultural thing would have a big impact on what they (the officers) are prepared to say." An additional comment was "A lot of people believe through surveys that their identity is known and they will not respond, especially where they can be held up for negative criticism." Other comments related to officers not liking to admit to what they perceived as a weakness, and would prefer not to respond to the question.

An issue of significance in relation to Emotional Support for officers enrolled in the MDP was the role of facilitators in the delivery of the MDP and the need for their understanding about the importance of the provision of emotional support. A further issue was the recording of undecided by many officers for the five questions and police culture and unwillingness to discuss such issues was attributed to this response. Implications for enhanced delivery of the MDP included the provision of professional development for facilitators to assist them to provide emotional support for officers enrolled in the program and to provide information about the role of a police officer for those facilitators who did not have a policing background.

7.3 CONCLUSION

This chapter provides the results of the analysis of the third phase of data collection for this study that was based on Research Question 5. The focus of this final research question was the implications of the study for enhancing the delivery of the MDP. An analysis of the data gained from the 475 completed questionnaires provided the basis for the development of the interview schedule for the two semi-structured interviews that were conducted with the manager of the MDP and the head of the School of Management.

An analysis of the responses to items within the seven scales that formed the questionnaire used in Phase 2 and reported in Chapter 6 formed the basis for the development of the interview questions for this third phase of data collection. Phase 3 of the data collection process for this study addressed Research Question 5: What are the implications of the study for enhancing the delivery of the Management Development Program?

Implications for the delivery of the MDP in relation to each of the seven scales are provided and in summary relate to the need for the content of the MDP to be relevant to the needs of officers and for officers to have a career plan. A further implication relates to the need for the staff of the MDP and members of the Senior Executive of the QPS to promote the importance of professional development. The need for the provision of learning support for officers enrolled in the MDP is an implication for the staff of the MDP.

Provision of professional development for facilitators of the MDP is a further implication for members of the Senior Executive of the QPS as is the necessity to ensure that all facilitators employed within the MDP had qualifications in management.

Chapter 8 of this thesis provides a discussion of the results of the three phases of data collection presented in Chapters 5, 6 and 7.

CHAPTER 8

DISCUSSION OF RESULTS

8.1 INTRODUCTION

This chapter draws together the research findings for all three phases of data collection as reported in Chapters 5, 6 and 7 and ensures that the research questions stated in Chapter 1 (Section 1.2.2) are answered and discussed. Thus, the purpose of this chapter is to interpret the research findings and discuss their importance for educational programs delivered in the distance education mode generally and for police officers. The five research questions (Chapter 1.2.2) are used to organize this chapter. The first question (Research Question1) relates to Phase 1 of this study. Question 1 was based on the six semi-structured interviews conducted with facilitators of the MDP and asked: What are the key factors that influence participation and performance by officers of the Queensland Police Service undertaking the Management Development Program by distance education? Question 1 is discussed in Section 8.2.

In Section 8.3, answers to Research Questions 2, 3 and 4 are been provided. Question 2 asked: Can valid scales to assess the factors that influence participation and performance of officers undertaking the Management Development Program be developed? Question 3 asked: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the Management Development Program? Question 4 asked: Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP be developed? This section is based on the results presented in Chapter 6 including the model that illustrates MDP success potential.

Section 8.4 is based on Phase 3 data presented in Chapter 7 of this study and answers Question 5 which states: What are the implications of the study for enhancing the delivery of the Management Development Program? The chapter summary provided in Section 8.5 provides a basis for the conclusions presented in Chapter 9.

8.2 RESEARCH QUESTIONS IN RELATION TO PHASE 1

Research Question 1 asked: What are the key factors that influence participation and performance by officers of the Queensland Police Service undertaking the Management Development Program by distance education? Section 8.2.1 considers Factors Encouraging Officer Participation in the MDP, Section 8.2.2 Factors Discouraging Officer Participation in the MDP and Section 8.2.3 Factors that Might Affect an Officer's Performance in the MDP. Factors that Might Influence an Officer's Termination of Enrolment in the MDP is addressed in Section 8.2.4 and Section 8.2.5 addresses Factors in Relation to the Provision of Student Support for Officers Enrolled in the MDP.

8.2.1 Factors Encouraging Officer Participation in the MDP

As explained in Chapter 1 of this thesis, the MDP was a compulsory requirement for those officers who sought promotion from the respective ranks of senior constable, sergeant and senior sergeant to the next rank. Some officers resented the compulsory nature of the program and preferred the previous promotional system that was based principally on seniority. This was an issue of concern for the QPS if, as an organization, the service wished to encourage officers to undertake higher education because as Shernock (1992) notes such education should not be linked solely to career advancement. In contrast to the QPS where the completion of management education is a prerequisite for eligibility to apply for promotion, in a survey of European systems of police education and training, Pagon, Virjent-Novak, Djuric and Lobnikar (1996) found that participation in management training was not a prerequisite for promotion into management ranks in any of the seventeen countries surveyed. As Belling (2001) notes, however, many businesses provide management education at different stages of a manager's career and the MDP was offered in accordance with this development as education was provided for officers at the rank of senior constable, sergeant and senior sergeant.

Because many of the officers, particularly at the rank of senior constable and sergeant were engaged in roles with a predominantly operational focus, they preferred to undertake continuing education and professional development of an operational nature. While the research findings relate to reasons students withdrew from distance education programs, findings by Fenner (1998) indicate that students withdrew from courses of study because they believed that the course content did not meet their interests. This finding is reinforced by Shernock (1992) who found that officers regarded technical efficiency even more highly than ethical conduct. A possible explanation for officers not appreciating the value of management education was provided by Bourne (1991 p. 262) who addressed the issue of conflict in thinking styles when officers must have firm evidence that can be used in court as opposed to "the balance of probabilities on which management decisions are made."

While the operational aspects are fundamental to a police officer's role, as Glidewell and Hargrove (1990) note, police officers face impossible problems in their daily lives and must strive to balance the mythical long-term goals and pragmatic reality.

Vickers and Kouzmin (1998), however, support management education for police and believe police must widen their focus from an operational to a management focus. As Hoover and Mader (1990), Marlow and Beagle (1996), and Raine and Wilson (1993) note, there are many similarities between a police manager's role and that of private sector practitioners. Many officers did not appreciate that the MDP was designed to equip them with the knowledge and skills they would need as managers when promoted to the next rank. In the principal responsibilities of Position Descriptions (QPS, 2004) for officers at the rank of sergeant and senior sergeant "management techniques" and "performance management" responsibilities are requirements of such positions. In addition, officers at these ranks are required to "Effectively manage human resources, using contemporary human resource management practices to achieve efficient operations within the division while maintaining employee satisfaction" (QPS). Many officers, however, are positive about undertaking the program and appreciate the benefits of being prepared to undertake new duties that have a management focus. In addition, many officers appreciate the opportunity to add qualifications to their curriculum vitaes without meeting the cost of the education as the MDP is offered free-of-charge.

Past experience in tertiary education was another factor that encouraged officers to participate in the program. Officers with experience at undergraduate level had been exposed to the academic reading and writing levels that were required at postgraduate level. Although a bridging subject is offered to those officers who had not undertaken formal tertiary study, completion of this subject did not equip many officers with the academic reading and writing skills and higher level research, analytical and conceptual skill development that is necessary to achieve well within the program.

A further factor that encouraged officers to enrol in the MDP was that many officers had a positive attitude to undertaking continuing education and professional development, and had an expectation that they would achieve well and benefit from the learning experiences provided. Bittner (1990) describes such officers as having strong intellectual aspirations, analytical tendencies and a positive pursuit of knowledge.

Financial reward also encouraged some officers to participate in the MDP. An officer is entitled to receive a pay increment for each unit of the program completed. In addition, some officers appreciate the articulation arrangements that exist with five Australian universities that allow officers to gain recognition of prior learning toward a master's level qualification for each unit completed. This arrangement meant that officers receive three units of a master's degree free-of-charge.

As outlined in Chapter 1 of this thesis, the MDP is offered by distance education mode. This method of delivery permits equitable access to the program by all officers of the service, irrespective of their geographic location in Queensland. For some officers this is a positive factor as they can organize their time to study around work and family commitments without having to attend lectures at an educational institution. For other officers the distance education mode of study is difficult because they do not have the academic reading skills to cope successfully in a course of study based predominantly on reading.

In regions where senior officers of the service are very positive about the MDP and encourage subordinate officers to undertake the study, this has a positive effect on the attitude of younger officers. The QPS is a para-military organization with a rank structure. Officers are influenced by the attitude and behaviour of more senior officers and this is evident in relation to the MDP, particularly where senior officers overtly communicate their support for the program and the benefits that could accrue, not only to individual officers but also to the organization through officers engaging in the study. Tannenbaum and Yukl (1992) and Holton et al. (1997) document the importance of supervisors providing support to junior employees.

Another factor that encourages participation of officers in the program relates to the enthusiasm and academic credibility of facilitators and senior managers of the program. Both police officers and staff members are facilitators and senior managers of the MDP. Bourne (1991) found that a common complaint by officers who attended a police training institution in the United Kingdom related to the credibility of those who delivered the program and the need for such educators to have current knowledge of policing realities. Such criticism could not be levelled at those officers who delivered the MDP because officers were, in the main, promoted to the program from an operational context. While some officers who enrol in the program prefer to relate to another police officer, many prefer to liaise with civilian facilitators. The level of enthusiasm communicated by facilitators affects officer participation and performance in the program. Similarly, the credibility with regard to qualifications and experience of all facilitators and senior managers is seen to have an effect on officer participation.

8.2.2 Factors Discouraging Officer Participation in the MDP

While many officers of the service are keen to gain promotion, others are content to remain at their current rank and are not interested in undertaking study that is a requirement for promotion. Some officers also do not have an interest in undertaking continuing education and professional development. The culture of the QPS does not actively encourage engagement in tertiary study, and this has considerable implications for the service with

regard to achieving the desired change from vocational to professional status as outlined in Chapter 1 of this thesis. Fitzgerald (1989) and Bolen (1997) note such anti-intellectual culture in Australian police organizations.

As mentioned in the previous section, a factor that discourages some officers from participating in the MDP is their lack of understanding of the academic process generally, their lack of undergraduate qualification, their fear of failure of attempting study at the postgraduate level at which the program is set and their fear of studying in the distance education mode. With regard to lack of academic experience, Knowles (1975) cites the importance of students learning the skills of self-directed inquiry before entering academic programs. Calder and McCallum (1998) support Knowles when they emphasise the need for distance learners to have self-discipline. The aspect of fear of studying in the distance education mode is supported by the findings of Chacon-Duque (1987) in relation to research into student attrition where Chacon-Duque found that many students were not confident in learning in distance environments.

Other factors that discouraged some officers from enrolling in the program were the time they had available for study, the level and nature of their work commitments, family commitments and time devoted to other interests. Such findings are in accordance with those of Thorpe (1987) and Evans (1994). In an article published in *The Courier Mail* on September 28, 2002 journalists Doneman and Smith quoted a police officer who stated that the MDP "...is stacked against operational police, uniformed and plainclothes." The officer claimed that officers had insufficient time to cope with their normal workload and that undertaking study "was a huge impost on families of police who are operational." Similar findings have been noted by Newstrom (1986) who found work pressures discouraged managers from undertaking management education.

A further factor that discourages officers from enrolling in the MDP relates to the perceptions held generally about the reason the program was introduced. At the time the program was introduced the perception was that the conditions for gaining promotion had changed and this caused resentment among some officers. Instead of directing their

resentment toward the service generally, some officers direct their resentment toward the actual program and choose not to enrol. The negative effects of resistance to training have been documented in other contexts by Patching and Higginbotham (1994) and Hastings et al. (1995).

8.2.3 Factors that Might Affect an Officer's Performance in the MDP

While many officers who enrol in the MDP are very positive about their experience and achieve highly, many other officers enrol but are not interested in the notion of policing as a profession and the associated requirement that officers should engage in continuing education. Such officers are clearly not goal-oriented learners as described by Houle (1971) and cited in McCreary (1990) and as Houle notes such a characteristic is a critical factor for success in a distance education program. Many officers who enrol resent having to complete the study to be eligible for promotion, and as a consequence are not motivated to perform well. Conversely, those officers who seek promotion are motivated to perform well.

Performance of officers is affected positively or negatively by the level of intrinsic motivation an officer possesses. As well, officer performance is enhanced or hindered by levels of academic reading and writing skills, ability to interpret assignment topics and past educational experience generally. As researchers such as Lyon (1993), Marsh (1987), and Michael, Denny and Michael (1984) found, academic self-concept has a high correlation with academic achievement and this is relevant to this study because it could be expected that those officers who did not have academic experience at undergraduate level would not have a high academic self-concept and would experience considerable difficulty with study at the postgraduate level.

An officer's exposure to the corporate elements of the service has a positive effect on performance within the program, as such experience provides officers with an understanding of the importance not only of the need to manage people well, but also of the strategic aspects of planning. As well some officers who only have operational policing

experience do not appreciate the benefits of sound management practices to individuals and the organization. Such officers do not see the relevance of the study and this affects their attitude to undertaking the MDP. This finding is in accordance with that of Newstrom (1986) and this negative attitude toward management education affects how some officers feel toward their study when enrolled in the program.

An officer's performance within the program is also influenced by the role of the Queensland Police Union of Employees (QPUE) which Lafferty and Fleming (2000, p. 157) state "...came to play a pivotal role in decision-making processes as they affected employment practices within the organization." As Lafferty and Fleming (p. 157) note, the QPUE has "consistently opposed operational and administrative police reform" and when the QPUE opposed the introduction of the MDP this had a negative effect on their attitude to the program for some officers.

8.2.4 Factors that Might Influence an Officer's Termination of Enrolment in the MDP

As mentioned in sections 8.2.2 and 8.2.3 an officer's lack of previous academic experience and the fact the MDP is set at postgraduate level, are factors that discouraged officer participation and performance in the program. These issues are also factors that influence an officer to terminate enrolment in the program, particularly if an officer fails a piece of assessment.

Additional significant factors that lead to an officer's termination of enrolment relate to the attitude an officer has to continuing education and professional development and an officer's level of understanding about the commitment required for study. Further issues relate to an officer's willingness to commit time to study and to persevere to meet course requirements. Researchers such as Kortens (1990), Nash (1991), and Raynor (1985) have documented such factors in relation to retaining students in distance education programs. Powell, Conway and Ross (1990) proposed a multivariate framework for analysing success and persistence in distance education and highlighted the aspect of educational background that directly relate to the findings of this study. Many officers who do not have

undergraduate qualification experience considerable difficulty coping with the requirements of the study at postgraduate level. Fitzgerald (1989) had recommended the introduction of higher education on the basis of United States research that showed a correlation between higher education and police effectiveness (Carter et al., 1989). Some officers believe the culture of the service is not supportive of continuing education and professional development, and this influenced some officers in operational roles and contributed to their decision to terminate their enrolment in the program.

The factor of work and family commitments inhibiting participation and performance has been raised earlier in this chapter, and these two factors also contribute to an officer's decision to terminate enrolment in the program. Kemp (2002) found that work commitment was a highly significant predictor of negative persistence in a distance education program. Chan (1999) and Thompson (1997) have reported similar results. Woodley (1987) in researching student attrition contended that many students attribute their decision to withdraw from courses of study to lack of time when students may actually have had difficulty coping with the level of the course or had not given the course the attention it required to achieve well. Such research findings can also be applied to officers who withdraw from the MDP.

A significant further factor that resulted in termination of enrolment by some officers was their unwillingness to seek assistance from facilitators of the MDP. As Karabenick and Knapp (1991), Newman and Schwager (1995), and Ryan and Hicks (1997) note it is imperative for successful learning that students seek help when they are unable to resolve a learning issue independently. An additional reason for student withdrawal is provided by Brown (1996) and relates to a student's inability to receive timely feedback from academic staff. Tait (2003) emphasises the need for student support as a reinforcer for the student's sense of confidence, self-esteem and progress. Smith, Robertson and Wakefield (2002) also support the importance of facilitators encouraging independence and self-directedness in learners. Extensive learning support services are available for all officers enrolled in the program and are delivered by telephone, email or face-to-face for those officers who can visit the QPS Academy in Brisbane.

8.2.5 Factors in Relation to the Provision of Student Support for Officers Enrolled in the MDP

A focus for this study relates to the provision of student support required for officers enrolled in the MDP and to pre-enrolment support as well as support for officers once enrolled in the program. Pre-enrolment support relates to the need for officers to have the academic reading and writing skills to permit them to study at postgraduate level. The importance of support with academic writing was highlighted by Morgan et al. (1998) who found that students who were not assisted to gain the appropriate level of academic writing skills often believed they did not have the ability to succeed. In line with Knowles (1980) theory of andragogy and the need for the learning experience to be meaningful, support once officers are enrolled is based on the need for the content of the material to be current and relevant to the role of police officers, to ensure that appropriate instructional design techniques are incorporated in the material to assist officer learning, and to ensure that the way assessment items are marked promotes learning for officers. These features may be described as scaffolding in accordance with Vygotsky's (1978) concept of the zone of proximal development that refers to a learner's potential to maximise his or her potential when supported in a timely and appropriate way by a learning facilitator. Shale and Garrison (1990) also emphasise the importance of interaction between facilitators and students.

Factors of a student support nature also relate to the qualifications and experience of facilitators employed within the MDP. It is imperative for the QPS to ensure that all facilitators who are employed within the program have the required levels of qualification and experience to perform their duties, as is mandatory for colleagues in other institutions of higher education.

The ratio of facilitators to officers enrolled is another factor relating to student support.

Because of the lack of academic experience of many officers enrolled in the program, this ratio should be higher than that for similar programs in other institutions of higher education. The nature of police culture is a further factor that impacts on student support as,

for many officers, the culture negatively influences them with regard to seeking assistance from facilitators as it is seen as a sign of weakness. In addition to requiring support from facilitators of the MDP, officers enrolled in the program also require support from family, members of the senior management of the service and the QPS generally. Such findings from this study are supported by McGiverney's (1996) research as reported by Asbee and Simpson (1998) that indicate that good support from partners, family and friends, good contact with the institution and good contact and support with other students contributes positively to the retention of students in programs of study. Asbee and Simpson's research related to students' perceptions of support, within a distance education program, and reported students rated support by partners, family and friends the most important, followed by that of tutors, other students and then the institution. Findings about a postgraduate program reported by Cain, Marrara, Pitre and Armour (2003) indicate that students expected support from their instructors with on-campus academic and administrative services, and that as with Asbee and Simpson's findings that family and friends were valuable sources of academic and social support. Kruth and Murphy (1990) and Wong (1987) also highlighted the importance of effective interaction between student and facilitator in distance education programs.

8.3 IDENTIFICATION OF SEVEN AREAS THAT FORMED THE BASIS FOR SCALE DEVELOPMENT

Research Question 2 stated: Can valid scales to asses the factors that influence participation and performance by officers undertaking the Management Development Program be developed? This section provides discussion about the identification of five concept areas derived from the interviews conducted with the six facilitators of the program as discussed in Section 8.2. The areas that subsequently formed the basis for scale development for the questionnaire used in Phase 2 of the data collection process are In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery. As outlined in Chapter 4 (Section 4.3.2.2) the additional scales of Officer-Staff Member Discourse and Emotional Support were included in the questionnaire. Section 8.3.1 addresses In-service Professional Development, Section 8.3.2

Policing as a Profession and Section 8.3.1 MDP Success Potential. Student Support is addressed in Section 8.3.4 and Clinical Program delivery in Section 8.3.5. The additional scales Officer-Staff Member Discourse and Emotional Support are addressed in Sections 8.3.6 and 8.3.7 respectively.

8.3.1 In-service Professional Development

This scale was developed because the MDP was introduced as part of the continuing education and professional development opportunities offered by the QPS to officers in direct response to the Fitzgerald Report (1989) and a report by the Criminal Justice Commission (1994) as outlined in Chapter 1 of this thesis. Six facilitators who were employed within the MDP provided their perceptions about Research Question 1 (Chapter 1.2.2) as outlined in Section 8.2 of this chapter. It was important for this study to determine the perceptions of officers about undertaking in-service professional development. As noted in Table 4.1 of Chapter 4 of this thesis, the description for the scale In-service Professional Development relates to the extent to which an officer acknowledges the need for the planned acquisition of knowledge, experience and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout a police officer's life.

Significant features of the data collected during the interviews with the six facilitators led to In-service Professional Development being developed as a scale. To answer Research Question 3 (as outlined in Chapter 1.2.2) these features needed to be tested through the questionnaire that was completed by officers who had undertaken at least one unit of the MDP.

With regard to undertaking in-service professional development, facilitators of the program believe that many officers do not value the opportunity to undertake continuing education and professional development. Many officers enrolled merely because completion of the MDP was a mandatory requirement if an officer wanted to be eligible to apply for promotion to the next rank. While some officers had accommodated to the changed

requirements for promotion, many preferred the previous model based principally on seniority. Many officers do not value in-service professional development for the educational benefits it can bring either personally or to the organization. Neither do they appreciate the importance of officers having a sound career plan of which professional development is an inherent part. As well, many police officers in operational roles do not appreciate the importance of sound management practices at all levels of the service, or the corporate aspects such as strategic leadership and management that are addressed in the unit offered for senior sergeants.

Many senior members of the QPS have not undertaken management education and because they were at a rank higher than senior sergeant when the MDP was introduced, were not required to undertake such study. Many also do not have any tertiary qualifications, and as a consequence did not appreciate the value of education for younger officers. Many senior officers do not appreciate the importance of participative decision-making as opposed to the command and control management style with which they are familiar, and as a consequence do not support the introduction of a different style of management. Support for the MDP by senior officers and for their younger colleagues undertaking the study is imperative for the success of the program.

To test officers' perceptions about in-service professional development, 8 items were subsequently developed for the scale In-service Professional Development for inclusion in the questionnaire used in the main study as outlined in Chapter 4 (Table 4.3) of this thesis.

8.3.2 Policing as a Profession

Criticism of police performance, practice and leadership and the low priority given to police training and professional development has been documented worldwide by writers such as Moffitt (1974), Lusher (1981), Costigan (1984), Rawson (1986), and Stewart (1983). As mentioned in section 8.3.1, the MDP was introduced as a result of both the Fitzgerald Report (1989) and a report by the Criminal Justice Commission (1994). In both

these reports the importance of higher education for police officers was stressed and the report by the Criminal Justice Commission emphasized specifically the need for officers to undertake management education. Related to these two reports were the outcomes of a meeting of Commissioners of Police (1999) for all jurisdictions throughout Australia that highlighted the importance for a move from vocational to professional status for police services. Writers such as Manning (1977), Reiner (1986), and Dale (1994) have all emphasised the need for professional police services.

The scale description, as outlined in Table 4.1 of Chapter 4 of this thesis, focusses on the extent to which an officer perceives policing as a profession. The scale Policing as a Profession was developed in response to outcomes from the interviews conducted with six facilitators of the MDP who have direct contact with officers enrolled in the program and were aware of the reasons the program was introduced. Facilitators believe that many officers do not understand the reasons the program was introduced and do not appreciate the benefits of undertaking further education and especially management education. Many police officers view policing as having principally an operational focus and do not appreciate the importance or benefits of working within an organization that has sound management practices at all levels. In addition, many officers focussed on operational tasks and did not embrace the notion of policing as a profession. To many officers policing is a vocation with an operational focus as opposed to policing having a professional status.

To answer Research Question 3: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the Management Development Program? (as outlined in Chapter 1.2.2) it was necessary to test officers' perceptions of policing as a profession. This scale was used as the basis to test officers' perceptions of the importance of management education in relation to professional status of the organization. To test officers' perceptions of policing as a profession, 7 items were subsequently developed for the scale Policing as a Profession for inclusion in the questionnaire used in the main study as outlined in Chapter 4 (Table 4.4) of this thesis.

8.3.3 MDP Success Potential

This scale was developed because facilitators who were interviewed, as reported in Chapter 5 of this thesis, believe that many officers had difficulty coping with the demands of the academic nature of the MDP and the postgraduate level at which it was set. As outlined in sections 8.3.1 and 8.3.2 an analysis of the perceptions of facilitators who were interviewed during Phase 1 of data collection for this study formed the basis for the scales developed. The scale MDP Success Potential relates to the extent to which an officer has been prepared to, and is willing to study at the level required.

As reported in Chapter 1, officers are compelled to enrol in the MDP if they wish to be eligible for promotion. Many officers have not undertaken study at undergraduate level, and as a consequence struggle with the demands of a program that requires a demonstration of skills commensurate with postgraduate study. Many officers had undertaken training within a competency-based framework and had not been required to complete essays where research as well as demonstration of conceptual and analytical skills had been required. As well, because the program is offered in the distance education mode, officers have to be disciplined with regard to the time they allocate to study and completion of assessment items. Facilitators believe that many officers are reluctant to seek assistance with learning support, and as a consequence do not avail themselves of the learning support that is readily available. Within the scale MDP Success Potential, 7 items were subsequently developed for inclusion in the questionnaire used in the main study as outlined in Chapter 4 (Table 4.5) of this thesis.

8.3.4 Student Support

The scale Student Support resulted from an analysis of perceptions of facilitators who were interviewed during Phase 1 of data collection for this study as outlined previously in this section. Scale description for Student Support is based on the extent to which an officer needs support from the program and senior officers to be successful within the MDP.

With regard to support that could be offered through the program, facilitators believe that officers would benefit from visits by facilitators to officers' workplaces and the conduct of orientation programs, tutorials and assignment-writing workshops in workplaces.

Additional support services that facilitators believe would benefit officers include the use of emails to provide encouragement and assistance with the completion of assessment items as well as telephone tutorials for the same purpose.

A positive and supportive attitude generally on the part of facilitators to providing assistance is also seen as crucial by facilitators. This is consistent with the findings of research conducted by McCahon (2000) based on an evaluative study of students who undertook a library studies course by distance education through the Wellington College of Education, New Zealand. Professional assistance in the form of positive and meaningful feedback on assessment items is also seen as crucial to a sound student support service. It was considered important to determine officers' perceptions about both the attitude of facilitators and the professional assistance that was provided by facilitators of the MDP. Facilitators also believe that the support of senior members of the QPS for the MDP is also an important contributing factor to officers' success within the program, and it is important to determine how officers perceive such support offered by senior members of the service for the program. To test officers' perceptions about these aspects of student support, 9 scale items were developed for inclusion in the questionnaire used in the main study as outlined in Chapter 4 (Table 4.6) of this thesis.

8.3.5 Clinical Program Delivery

This scale was developed because it relates directly to the actual delivery of the MDP and was designed to determine officers' perceptions about the model of delivery of the program, the way learning material was presented, the content of the program and how officers' learning was assessed. As outlined in Chapter 4 (Table 4.1) the scale description for the Clinical Program Delivery Scale focusses on the extent to which the mode of delivery and the nature of the program supports the participation and performance of officers.

Facilitators believe that the distance education mode of delivery of the MDP suits the learning style and personal circumstances of many officers. Findings by the Open Polytechnic of New Zealand (1999) support such findings. Students valued not having to attend classes, being able to study at their own pace and at times that suited them. In contrast, many officers have difficulty combining employment, study and family commitments with the distance education mode of delivery. While Atack and Rankin's (2002) research was with online study, they also found that lack of time for study impacted on student success. Facilitators also believe many officers have difficulty coping with a program that requires sophisticated reading skills, and while many officers cope well as independent learners, other officers prefer to learn in a group environment.

Materials provided to officers enrolled in each level of the MDP consist of Unit Information, a Learning Guide and Readings in management. A general perception of facilitators is that many officers do not appreciate that the content of each of the levels of the MDP is designed to equip officers with the knowledge they would need if they were promoted to the next rank and the inherent responsibilities as managers they would be required to assume at that rank. As a consequence, many officers do not see the relevance of the content of the program because they cannot apply what they learn to their immediate work context. While the readings relate directly to the management concepts developed in the content, many officers experience difficulty coping not only with the volume of reading required, but also with the academic level of the readings. Facilitators believe that because assessment items are set to reflect a postgraduate academic level many officers, particularly those who have not undertaken undergraduate level study, have difficulty interpreting the topic and developing appropriate responses. Such findings are supported by Rekkedal (1983) who found there was a correlation between previous education attainment of students and success in distance education programs in Norway.

To determine officers' perceptions about these aspects related to clinical program delivery, 6 items were developed for the Clinical Program Delivery Scale and these were included in the questionnaire used in the main study as outlined in Chapter 4 (Table 4.7) of this thesis.

8.3.6 Officer-Staff Member Discourse

As outlined in section 4.3.2.2 of this thesis, as part of the process for the refinement of the questionnaire based on the pilot study that incorporated the five scales of In-Service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery, two additional scales were adapted from The Metacognitive Orientation Learning Environment Scale – Science (MOLES – S) (Thomas, 2002). The scale Officer-Staff Member Discourse was developed because of the importance of positive interaction between student and teacher in all forms of educational delivery, including programs offered in the distance education mode. Rakkedal (1973), Baath (1980) and Paulson (2002) all promote the importance of student-teacher interaction in distance learning contexts. Rakkedal (1973) and Baath (1980) believe student success relies on the quality and frequency of such interaction. Further, Young and Shaw (1999) believe effective communication is highly correlated with teacher effectiveness. Issues in relation to this scale were not addressed in the interviews with the six facilitators who provided information as Phase 1 of this study.

The description for the scale Officer-Staff Member Discourse is based on the extent to which officers feel they can engage with facilitators of the program about their learning. As outlined in Chapter 4 (Table 4.8) of this thesis, items adapted for this scale relate to whether officers are encouraged to discuss how they learn about management, how officers think when they learn about management, whether officers can discuss different ways about learning about management, whether officers can discuss how well they are learning about management and whether officers can discuss with facilitators how they can improve their learning about management. To determine officers' perceptions about Officer-Staff Member Discourse, 5 items were included in the main questionnaire used for this study as outlined in Chapter 4 (Table 4.8) of this thesis.

8.3.7 Emotional Support

Issues in relation to Emotional Support had not been raised during the interviews with the six facilitators who provided data for Phase 1 of this study, but such issues were considered important with regard to factors that affected an officer's participation and performance in the MDP. As noted in section 8.3.6 two additional scales were adapted from The Metacognitive Orientation Learning Environment Scale – Science (MOLES – S) (Thomas, 2002). The Emotional Support Scale description relates to the extent to which officers feel supported in their learning about management. Tait (2000) addressed the issue of learner support in distance education and believes the focus should be on cognitive, affective and systemic elements. Further, Tait believes students should feel they are valued as learners. Saba (1998) reinforces the need within distance education programs for teaching and learning to be personalized. Elements of the scale that were subsequently included in the questionnaire used for the main study for this thesis addressed officers' perceptions about whether they are treated fairly as students of the program, whether officers believe their efforts are valued, whether officers believe their ideas are respected, whether officers feel their individual differences are respected and whether officers feel their suggestions are appreciated. In total 5 items were included in the Emotional Support Scale of the questionnaire used for the main study for this thesis and have been included in Chapter 4 (Table 4.8).

8.4 RESEARCH QUESTIONS IN RELATION TO PHASE 2

Section 8.3 provides discussion about Research Questions 1 and 2. This section provides discussion about Research Question 3 that stated: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP? These characteristics were gender, age, whether an officer had dependent children or not, rank, type of duty performed, highest educational level attained and geographic remoteness. Section 8.4.1 considers the effects of gender, Section 8.4.2 age and Section

8.4.3 dependent children. Rank is considered in Section 8.4.4, type of duty performed in Section 8.4.5, highest educational level attained in Section 8.4.6 and Section 8.4.7 considers geographic remoteness. Section 8.4.8 details discussion of a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP.

8.4.1 What is the effect of gender on factors influencing participation and performance of officers enrolled in the MDP?

An analysis of the MANOVA results conducted for this phase of the study reveals that there are not any significant differences between the perceptions of female and male officers in relation to any of the seven scales. Female officers have a slightly more positive attitude than their male colleagues in regard to In-service Professional Development.

Reasons for the lack of differences may be attributed to the recruitment and selection process employed by the QPS wherein all applicants undergo the same process. As noted in the *Review of Recruitment and Selection for the QPS* (1998) all applicants initially are assessed on their Australian citizenship status, possession of a driver's licence, educational qualification, employment experience and integrity. Psychometric assessment and an interview based on the selection criteria form the second part of the process. In the third phase the Selection Committee recommends whether an applicant should be accepted, carried over to a subsequent recruit intake pool or rejected.

There are several factors that may be attributed to this lack of difference between male and female officers. These include the attribute requirements for recruitment are the same for female and male recruits, initial and continuing education and professional development requirements are the same, and employment experiences and the nature of tasks officers perform are also similar.

8.4.2 What is the effect of age on factors influencing participation and performance of officers enrolled in the MDP?

As reported in section 6.2.2, officers within the age ranges of 21 - 30 years, 31 - 40 years, 41 - 50 years and 51 - 60 years completed the questionnaire for this phase of data collection. There were not any significant differences among officers in each of the four age groups in relation to any of the seven scales. From this study it was found that the attitude of officers, as measured on the seven scales, do not differ when age differences are considered and therefore the attitude police officers have at the commencement of their careers remains with them throughout their careers. Those who have a positive attitude to undertaking continuing education and professional development engage in such activity and this has a positive effect on their career advancement. While the difference is only slightly significant, officers in the age range of 51 - 60 years are more positive than their younger colleagues about Policing as a Profession, Student Support, Clinical Program Delivery, Emotional Support and Officer-Staff Member Discourse. While this study found officers in the age range of 51 - 60 years are the most positive, Rekkedal (1983) found in a Norwegian study that students who were over 50 years of age had higher course completion rates. Because officers with longer periods of experience had been required to undertake continuing education and professional development throughout their careers, they appear more accommodating to the experience than their younger counterparts who did not expect to have to meet such requirements once they had completed initial training.

8.4.3 What is the effect of dependent children on factors influencing participation and performance of officers enrolled in the MDP?

While the effect size is small, those officers who are responsible for dependent children are slightly more positive on every scale than fellow officers who do not have dependent children. The statistics show that there are only significant differences with Clinical Program Delivery and Emotional Support scales. As noted in Chapter 1 of this study,

officers were required to successfully complete respective units of the MDP before they could apply for promotion. Delivery of the program in the distance education mode allows officers flexibility about when they study, and the level of emotional support offered by facilitators of the program impacts upon officers who enrol in the program. Both these features of delivery of the program would assist officers with limited time to complete the study. While older police officers had been exposed throughout their career to a promotion system based principally on seniority, younger officers who had dependent children entered after the service had changed to an open process for promotion based on merit-based selection as per the Commissioner's Circular 24/91 (Appendix 16 D, Human Resource Manual). Fitzgerald's (1989) recommendations also resulted in changes to the QPS's promotion system and such changes were noted in section 5.2 "Appointment to be based on impartial procedures" of the *Police Service Administration Act 1990*, and in the provisions of the *Police Service (Administration) Regulations 1990*. Those officers who are keen to gain promotion accept that continuing education and professional development is a requirement of that process.

It was noted in the discussion regarding age that older officers generally were more positive on five of the seven scales than their younger counterparts. When the MDP was introduced, officers were only required to undertake those units that would equip them to be eligible to apply for promotion to the next rank. Therefore, officers who were already at the rank of senior sergeant were only required to undertake one unit of management study to be eligible to apply for positions at the rank of inspector whereas a senior constable was required to undertake three units to attain the same eligibility status. In addition, there were fewer officers at the rank of senior sergeant than at senior constable who enrolled in the program and, as a consequence, there was more potential for facilitators of that unit to offer additional learning support to the more senior officers. Further, a residential component is offered to senior sergeants enrolled in Management Studies in Policing 3 and this component is highly regarded.

8.4.4 What is the effect of current rank on factors influencing participation and performance of officers enrolled in the MDP?

There are significant differences within all seven scales among the ranks of senior constable, sergeant and senior sergeant. Officers at the rank of senior sergeant are consistently more positive than sergeants and sergeants are consistently more positive than senior constables in their responses. While Tinto's (1993) findings relate to social adjustment in the early stages of a student's college experience, there is transfer of such findings to this study. Of all officers, those at the rank of senior sergeant have had more exposure to administration and managerial responsibilities and as a consequence have a more sophisticated understanding of the benefits to work teams and the QPS generally of sound administrative and managerial practices. In addition, as was noted in the Commissioner's Circular 1/1999 (Appendix 16 D, Human Resource Manual), completion of the highest level of the MDP is mandatory for officers at the rank of senior sergeant who sought promotion to the rank of inspector.

Sergeants are less positive in their responses on all seven scales than senior sergeants, but more positive than senior constables. Officers at the rank of sergeant have had more exposure to management roles and as a consequence have a greater understanding of the importance of management within the QPS. Learning experiences provided within the units offered by the MDP are more beneficial and meaningful to sergeants than to senior constables from the perspective of application of management theory. As noted in section 8.4.1 of this chapter position descriptions for officers at the ranks of sergeant and senior sergeant required officers to have management knowledge and skills.

As reported in section 6.2.4, officers at the rank of senior constable are the least positive of all three ranks in their responses to the seven scales, and this is attributed to the nature of their duties where the emphasis is on operational policing. Current trends in policing involving the identification and publication of organizational goals that link values, culture and corporate strategy as noted by Greene, Alpert, and Styles (1992) may not be appreciated by officers at the rank of senior constable. As a consequence senior

constables do not appreciate the benefits of having knowledge of management studies in policing. Because the content of the first level of management studies is designed to assist senior constables with their role when promoted to the rank of sergeant, the learning experiences are not as meaningful as if officers had been able to apply the knowledge gained immediately. Exceptions to this are officers at the rank of senior constable who are responsible for one and two-officer police stations throughout Queensland. Further, officers at the rank of senior constable generally do not have the experience to draw on to appreciate the relevance of management theory, and those officers at large provincial stations are not involved in managerial roles.

8.4.5 What is the effect of type of duty performed on factors influencing participation and performance of officers enrolled in the MDP?

Responses from officers were grouped according to the type of duty performed and the categories of Uniform General Duty, Plain Clothes, Administration/Managerial and Specialist were used. Differences between categories of type of duty performed are significant and results indicate that those officers in the administration/managerial category scored significantly higher on all seven scales than officers in the other three categories. Differences are not significant for officers in the categories of uniform general duty and plain clothes and both these groups scored consistently lower than the other two categories of administration/managerial and specialist. Such findings are consistent with research into a diploma-level professional development program conducted by Eijkman (1990) who referred to stressful work environments and officers being required to work overtime as barriers to participation for officers at the rank of constable. Those in the specialist category scored lower than those in the administration/managerial category. Officers engaged in administration and performing managerial roles clearly appreciate the benefits of sound managerial practices to the individual, work teams and to the organization. Those officers who perform specialist roles are supported by qualifications in their area of expertise and by association, appreciate the importance of a sound theoretical foundation to support practice. Officers who perform uniform general duties are directly involved in operational practice not related to management. Similarly, plain-clothes officers are

detectives who perform roles related to solving crime. Those officers who perform uniform general duties and plain-clothes officers have not been exposed to the corporate elements of policing, and as a consequence may not have an appreciation of the role of management performed at that level.

8.4.6 What is the effect of educational level attained on factors influencing participation and performance of officers enrolled in the MDP?

With regard to highest levels of qualification attained by officers, it was clear that those officers who had completed a Bachelor level degree or had completed or partially completed postgraduate qualification were consistently more positive in their responses on each of the seven scales. Those officers who had only completed secondary school or a technical and further education diploma scored consistently lower than their counterparts with academic qualifications. Research reported into a Constable Development Program for New South Wales (Australia) police by Pitts et al. (1999) found many officers enrolled had low levels of academic literacy, low subject matter knowledge, poor motivation and attitude and a passive approach to learning and, as with the research reported in this thesis, these factors impacted on the participation and performance of those enrolled.

Such responses reflect the attitude of general duty officers as noted in section 8.3.5, many of whom do not see the relevance of undertaking continuing education or professional development when their role focusses on operational policing only. In the past such officers had been promoted principally by seniority and had difficulty accommodating to the change to merit-based selection as outlined in section 8.3.3 that required them to compete on merit for promotion. Inherent in this process is the compulsory requirement to undertake continuing education and professional development in the form of the MDP. Those officers who had not undertaken any form of study since initial recruit training do not appreciate the benefits to be gained from study and how the knowledge gained could assist them to perform more effectively and to enhance the service offered by the organization. Further, because the program is offered at postgraduate level, many officers who have not engaged in formal study are not equipped with the skills of academic reading

and writing necessary to perform at the level required. An additional issue is the delivery of the program in the distance education mode that requires participants to have sound reading skills to master the content of the material. Those officers who had undertaken formal academic study at Bachelor degree level prior to enrolling in the MDP have the prerequisite skills to perform effectively at the level required, and this is demonstrated in their positive responses on each of the seven scales.

8.4.7 What is the effect of geographic location on factors influencing participation and performance of officers enrolled in the MDP?

For geographic remoteness, officers were grouped into the categories of Headquarters and Metropolitan North and South regions, North Coast, South Coast and South-Eastern regions, Central region and Northern and Far Northern regions. Those officers in Headquarters and Metropolitan North and South regions, North Coast, South Coast and South-Eastern regions and Northern and Far Northern regions scored consistently on all seven scales. While the differences were small, responses from officers in Central region were consistently lower than those of their colleagues in other parts of the state. Findings from this aspect of the study are in accordance with Wedemeyer's (1973) beliefs about the delivery of educational programs in the distance education mode that a student should not be denied the right to an education because of geographic isolation. Findings from this study indicate that an officer enrolled in the MDP is not disadvantaged by the mode of delivery of the program. This is in contrast to the findings of Meacham and Evans (1989) who found that geographical isolation was a major problem for students studying in the distance education mode.

8.4.8 Discussion of a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP.

Sections 8.4.1 - 8.4.7 of this chapter discuss Research Question 3 that was part of Phase 2 of the data collection process for this thesis. Discussion in this section is also based on

Phase 2 and addresses Research Question 4. This discussion is of a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP. As discussed in Chapter 6 (Section 6.5) this model provides a comprehensive structural model for MDP success potential based on the data collected in this study. This model illustrates that an officer's success potential in the MDP is influenced by the variables Highest Educational Level Attained, Rank, Dependent Children and Geographic Remoteness.

An analysis of this model shows that higher qualifications possessed by officers are a positive predictor with regard to In-service Professional Development, Clinical Program Delivery and MDP Success Potential. Officers with graduate or postgraduate qualification acknowledge the importance of continuing education and professional development and that completing the MDP assists their career development and professional development as a manager. Further, officers who are qualified at graduate or postgraduate level also believe that officers should take responsibility for their own professional development and value being provided with free professional development via the MDP. Such beliefs are in accord with professions such as medicine where, as Gruly (2000) notes, responsibility for continuing medical education is assumed by the practitioner. With regard to Clinical Program Delivery, officers with graduate or postgraduate qualification find the learning guides and content of the material provided within the MDP easy to follow and that the readings provided assist their learning. These officers also believe that the assessment items test their understanding of the material and that the items are linked to the content of the material.

It can be expected that officers who responded positively to the aspects of In-service Professional Development and Clinical Program Delivery would also achieve well within the MDP. Such officers use effective time management strategies to accommodate to the demands of the study, find the content appropriate to their level of ability, are able to cope with the assessment requirements and accommodate to study in the distance education mode. Such features contribute to their success within the MDP.

This model indicates that an officer's rank has a direct effect on success potential within the MDP. Higher ranked officers report higher levels of agreement on the scales of Student Support, Policing as a Profession, Officer-Staff Member Discourse but lower levels on Clinical Program Delivery. Higher ranked officers, specifically senior sergeants are more prepared to attend orientation programs, face-to-face tutorials, assignment-writing workshops and telephone tutorials in their workplaces than their lower-ranked colleagues. These officers are also more positive in their responses about the assistance provided by facilitators generally. They also believe, more than their lower ranked colleagues, that feedback they receive on assessment items assists their learning about management. In relation to the scale Policing as a Profession, higher ranked officers believe that the study of management is important for officers who are, or are preparing to be managers and that by completing the MDP, they could be better managers. Further, such officers acknowledge the importance of all officers undertaking management education as it would assist the QPS to improve as an organization. Such findings are in accordance with those of Brauchle (1998) who found United States military service members initially receive external motivation to engage in professional development but as they progress through the ranks, motivation becomes internal.

Higher ranked officers are more positive than their lower ranked colleagues in relation to the scale Officer-Staff Member Discourse. Officers at the higher ranks feel they are able to discuss their development as managers with facilitators of the MDP. Central to this discussion is how they could improve their learning about management and different ways they could learn about management. For officers who have dependent children, there are not any significant effects on an officer's potential for success within the MDP, but there are indirect effects via scales of Emotional Support and Emotional Support and Officer-Staff Member Discourse. Officers who have dependent children are more inclined to seek assistance from facilitators of the MDP and through such association believe that their ideas are respected and their efforts are valued. Further, they believe that their individual differences are respected. Such officers also believe that they can discuss how well they are learning about management with facilitators of the program and can discuss different ways of learning about management.

As with officers who had dependent children, responses from officers living in different locations in Queensland show that geographic remoteness has only indirect effects on their potential for success within the MDP. As the model indicates, such indirect effects on success potential in the program are via scales of Emotional Support and via Emotional Support and Officer-Staff Member Discourse. As with officers with dependent children, officers in the more remote geographic locations in Queensland seek assistance from facilitators of the program and believe that their ideas are respected and their efforts are valued. Further they can discuss their progress in learning about management. Outcomes such as the ones noted for geographic remoteness can be expected as the program is offered by distance education mode to all officers enrolled and all have access to the same services offered by the program. In summary, the model shows that an officer's potential for success within the MDP is influenced by the variables of highest educational level attained, rank, dependent children and geographic remoteness.

8.5 RESEARCH QUESTION IN RELATION TO PHASE 3

Sections 8.2, 8.3 and 8.4 have discussed Phases 1 and 2 of the data collection process for this study. Section 8.5 focusses on Phase 3 and this phase of the study addresses Research Question 5 which asked: What are the implications of the study for enhancing the delivery of the Management Development Program? Discussion in this section centres on the seven scales as outlined in the previous chapter. Further, discussion in this section is based on the perceptions of the manager of the MDP and the head of the School of Management who were interviewed about the data provided by the 475 officers who completed and returned the questionnaire that formed Phase 2 of the data collection process for this study. Section 8.5.1 considers In-service Professional Development, Section 8.5.2 Policing as a Profession and Section 8.5.3 addresses MDP Success Potential. Student Support is considered in Section 8.5.4 and Clinical Program Delivery in Section 8.5.5. The scales Officer-Staff Member Discourse and Emotional Support are considered in Sections 8.5.6 and 8.5.7 respectively.

8.5.1 In-service Professional Development

As outlined in Chapter 4 (Table 4.1) the In-service Professional Development Scale relates to the extent to which an officer acknowledges the need for the planned acquisition of knowledge, experience and skills and the development of personal qualities necessary for the execution of professional and technical duties throughout a police officer's life. Further, as indicated in the introduction to this section, Phase 3 of the data collection process for this study related to Research Question 5, which considered the implications of the study for enhancing the delivery of the MDP. Three key issues about the MDP are noted in an analysis of the data in relation an officers' perceptions about in-service professional development.

The first issue is that some officers are aware of the benefits of undertaking in-service professional development not only for personal gains, but also to enhance the service offered by the QPS to the community. Other officers, however, do not appreciate the personal or organizational benefits of undertaking in-service professional development and engage in the MDP only to be eligible to apply for promotion. This requirement is outlined in Chapter 1 of this thesis. One reason offered for the unwillingness of some officers to engage in in-service professional development relates to the culture of the police service that supports those officers who focus on the technical nature of operational policing as opposed to supporting those officers who engage in study of an academic nature. Manning (1977) and Brown (1981) address this issue and note the conflict between management culture and the culture of incident command or police operations within police organizations. An implication for the delivery of the MDP is to promote the importance of in-service professional development for individual officers as well as for the service generally.

A second issue noted from the data collected relates to the role of senior officers of the QPS. Perceptions of those interviewed indicate that many senior officers of the service do not overtly support the MDP because they had not engaged in any form of management education and do not understand the nature of the content of the program. Many senior

officers operate within, and understand a command and control philosophy of management and do not appreciate the participative decision-making philosophy that is promoted for management contexts that are not related to managing critical incidents. While some senior officers are aware of the participative decision-making philosophy found in the content of the program, many other senior officers do not have a sound appreciation of the content of the MDP. An implication for the delivery of the MDP is to provide information about the philosophy and content of the program to all senior members of the service. Marsick and Watkins (1996) believe leaders must model learning and this is important if the MDP is to be successful. Further, managers of the program should seek the assistance of all senior managers in supporting their younger colleagues who are required to undertake study of management not only because they want to be eligible for promotion, but also because of the value of having sound theoretical knowledge to support their practice. An additional issue for the QPS relates to the findings of Kozlowski and Salas (1997) that organizational gain will not be realized if training is not transferred to the job setting. For this to occur, officers must feel supported in their learning by senior members of the organization. Further, while research by Dede (1996) refers to online learning contexts and the importance of students feeling a strong sense of community because it enhances learning satisfaction and group commitment, such research can be linked to the delivery of the MDP because of the importance of senior managers supporting younger colleagues who enrol in the program.

As noted in Chapter 7 (section 7.2.1.1) a third issue about in-service professional development and implications for the MDP relates to the perceptions officers have of undertaking the program and their professional development as managers, and to their career development generally. Many officers do not believe that undertaking the MDP will assist either their ability to manage or their career development. Kaplan and Norton (1996) reinforce the importance of motivation if employees are to contribute to organizational success. Those interviewed during this third phase of data collection believe that many officers do not understand either the role or the function of senior managers of the service. Further, because there is not a reward system for effective managers, officers do not value

undertaking study of management. An implication for the program is to promote the importance of sound management practices at all levels of the organization, and to ensure that content within the program is current and appropriate for the levels for which it is designed. A further implication is to assist officers to understand the importance of having a sound career plan and to provide information to officers about how they can acquire assistance with career planning.

8.5.2 Policing as a Profession

The scale description for Policing as a Profession, as outlined in Chapter 4 (Table 4.1) relates to the extent to which an officer perceives policing as a profession. As early as 1931 the Wickersham Report in the United States of America, which was based on a Presidential Commission on Criminal Justice, highlighted the need for a more professional approach to the delivery of police services to the community, and emphasised the need for formal education for officers (Trautman, 1986). Further, Sherman (1978) notes that college education for police was an inherent part of the movement to professionalise police services. For this study, an officer's perception of policing as a profession is related to his or her perceptions of undertaking the MDP. Four key areas are noted in an analysis of the data collected during Phase 3 of this study.

The first issue relates to the need for content of the MDP to be relevant to the roles officers are required to perform when promoted to the next rank. In any management education program it is appropriate to consider the theoretical base that supports the content, but as Jun (1997) notes the uncommonness of terminology, how an organization approaches problem solving generally and the difficulty of relating theory to praxis may cause problems for some learners. Findings from a study of management development and training for police conducted by Gaston and King (1995) indicate that over two-thirds of officers surveyed thought that management education programs of a generic nature, and not specifically focussed on police management, would be useful. Officers in that survey believed that external programs would provide a wider perspective and appreciation of

management and that officers would manage more effectively by using skills rather than relying on the formal authority derived from rank. Such findings are not supported by this study, which notes similar findings to that of Kakabadse (1984) about course content being directly related to policing. An implication for the enhanced delivery of the MDP is to ensure that the content of the program is both theoretically sound from a management perspective and relates directly to the roles and responsibilities of officers at the rank of sergeant, senior sergeant and inspector of the QPS. As Holton, Bates, Seyler and Carvalho (1997) note, to be effective for an organization, learning must be transferred to performance. To meet this requirement, a further implication is to ensure the theoretical basis is presented in a way that officers can easily comprehend.

A second issue about officers' perceptions of policing as a profession and the enhanced delivery of the MDP relates to ensuring that officers understand the benefits that can result from undertaking management education, not only from a personal perspective but also for the enhancement of the service offered by the QPS generally. Implications for the enhanced delivery of the MDP are two-fold in that such benefits should be promoted from within the program and also within the wider context of the organization of the QPS.

A third issue relates to the promotion of the need for professional development for all officers if policing is to be considered a profession, as opposed to a vocation. In this regard officers need to be made aware that the nature of skills required by managers differs significantly from those required by police in operational contexts. An implication for the MDP and for the QPS generally is to promote the importance of continuing education and professional development if policing is to have professional status. As well, it is important to promote that such professional status could be attained, in part, through officers having qualification in management education.

While the issue of senior officers of the service offering support for the MDP has been raised in relation to in-service professional development, it is again raised with policing as a profession. An implication for the program is to seek the assistance of senior members of

the service in supporting their younger colleagues in regard to undertaking management education. Results of research suggest that there have been considerable benefits derived from requiring police officers to undertake higher education and Carter et al. (1989) believe that educated officers are more able to handle difficult or ambiguous situations. Shernock (1992) found that educated police officers had a higher respect for the role of ethics and had an enhanced understanding of their professional role.

8.5.3 MDP Success Potential

This scale relates to the extent to which an officer had been prepared, and is willing, to study at the level required. As noted in Chapter 1 of this thesis, the MDP is offered at postgraduate level, and many officers who are required to undertake the program if they want to be eligible to seek promotion do not have qualification at undergraduate level.

As noted in Chapter 7 (Section 7.2.1.3) respondents agreed that many officers are hindered in their potential to succeed within the MDP because they lack qualification at undergraduate level and do not have the experience with academic reading, writing and reasoning that is required at postgraduate level. A pertinent issue raised by one respondent is that many officers are required to use a sophisticated level of knowledge and skills to analyse complex criminal and operational matters and should, therefore be able to transfer such skills to academic study generally and to study of management specifically. An implication for the delivery of the program is to assist officers to transfer such skills to the context of formal academic study.

Many officers are reluctant to seek assistance, not only with the interpretation of assignment topics but also with all aspects of their study. Reasons offered for this centre on an officer's unwillingness to admit to having a problem with academic reading and writing, and to an officer's unwillingness to risk being ridiculed in the workplace by acknowledging such problems existed by seeking help. An implication for the delivery of the MDP is to ensure that additional learning support needed by officers is provided.

8.5.4 Student Support

As outlined in Chapter 4 (Table 4.1) the description of the Student Support Scale refers to the extent to which an officer needs support from the program and senior officers to be successful. The issue of senior officers providing overt support for younger colleagues has been discussed in relation to both of the scales In-service Professional Development and Policing as a Profession. Of importance in this regard for officers are the student support services such as the provision of orientation programs, telephone tutorials, face-to-face tutorials and assignment-writing workshops in the workplace that are provided.

In Chapter 7 (Section 7.2.1.4) of this thesis it was noted that only half of all officers who responded to the questionnaire distributed as Phase 2 of the data collection process for this study indicated they would attend an orientation program for the MDP or would attend telephone tutorials. As indicated by those who were interviewed about the implications for the delivery of the MDP during Phase 3 of the data collection process for this study, lack of interest in taking advantage of such support services could be attributed to a genuine lack of interest in continuing education and professional development and in participating in the MDP. An implication for the program is to offer support of this nature to those officers who are interested. While slightly higher numbers of respondents indicated a willingness to attend tutorials and assignment-writing workshops in workplaces, an implication for the program again is to make such support services available to officers and to encourage participation in such events.

Response rates of 59% from officers who believed that facilitators of the program had a positive attitude to providing assistance to officers and of 35% who believed facilitators contributed to their success in the MDP are not indicative that facilitators are providing a satisfactory level of service to officers enrolled in the program. Part of the role of a facilitator of any educational program must be to support students and to contribute meaningfully to their success. An implication for the delivery of the program is to ensure that facilitators employed within the program have appropriate qualifications. A further

implication is to ensure that effective induction programs are conducted for new facilitators and that mentoring occurs.

The fourth issue noted from an analysis of the data relates to the quality of feedback on assessment items provided to officers by facilitators with only 31% of respondents believing that feedback received assists their learning about management. Because many facilitators employed within the program do not have formal qualifications in management they do not have the knowledge and understanding of management theory to provide effective feedback. As noted in Chapter 7 (Section 7.2.1.4) it is imperative that professional development is provided for facilitators and that qualification in management is a mandatory requirement for those seeking employment within the program.

8.5.5 Clinical Program Delivery

As noted in Chapter 4 (Table 4.1) the Clinical Program Delivery Scale relates to the extent to which the mode of delivery and the nature of the program support the participation and performance of officers. Two key issues relate to clinical program delivery and are the mode of distance education delivery of the program and the learning guides and materials provided. While some officers favour the distance education mode of delivery, other officers cannot accommodate to this mode of delivery that requires them to be independent learners and where reading is the basis for learning. An implication for the delivery of the program is to provide support for officers to assist them to cope with learning in the distance education mode.

Because only half the respondents indicate they found the learning guides and materials easy to follow, this has significant implications for the delivery of the program. One reason could be that many officers who enrolled in the program did not have an undergraduate qualification, and as a consequence were not familiar with academic study. An implication for the delivery of the program is to provide material in a user-friendly format that might encourage officers to engage in learning.

8.5.6 Officer-Staff Member Discourse

The Officer-Staff Member Discourse Scale refers to the extent to which officers feel they can engage with facilitators of the program about their learning, as noted in Chapter 4 (Table 4.8). Of all officers who completed the questionnaire that formed Phase 2 of the data collection process for this study only one-third believe that they are encouraged to discuss with MDP staff how they learn about management; how they think when they learn about management; can discuss different ways of learning about management; and can discuss how well they learn about management.

Student-teacher interaction is an extremely important aspect of the adult learning process and, as Brookfield (1986) notes a very successful technique in helping adults learn is to provide an environment so that the adult learner can talk about how they relate new information to what they already know. Further, as Andrusyszyn, Iwasiw and Goldenberg (1999) found the learning experiences of students are enhanced through interaction with lecturers. Williams (2003) found when researching roles and competencies for distance education programs in higher education institutions, interpersonal and communication skills dominated the top ten competencies. As well, Kearsley (2000) believes instructors can enhance or decrease student interaction depending on the consistency of communication, response times and helpfulness of responses to students. Roblyer and Wiencke (2003) also reinforce the importance of effective interaction between instructor and student in distance education courses in relation to higher achievement and student satisfaction. Many facilitators of the MDP are police officers who do not have formal qualification in management or education, and are inexperienced as facilitators of management education. As a consequence, such facilitators may experience difficulty engaging with officers enrolled in the program about such aspects of learning. An additional factor relates to police culture and a lack of willingness by officers to discuss such factors with other police officers. An implication for the delivery of the program is to ensure that all facilitators of the program have the required academic qualifications in management to facilitate within the program. A further implication is to ensure that

professional development opportunities are provided for facilitators to assist them in their role as distance educators.

8.5.7 Emotional Support

As noted in Chapter 4 (Table 4.8) the Emotional Support Scale refers to the extent to which officers feel supported in their learning of management. As with the Officer-Staff Member Discourse Scale, low responses on the five scale items are noted. Reasons provided for very low numbers of respondents believing they are treated fairly within the program, that their efforts are valued, that their ideas are respected, that their individual differences are respected or that their suggestions are appreciated relate to the fact that many facilitators who are employed within the program have limited qualifications in either management or education. A further reason relates to the need for those facilitators who are not police officers to understand the role of a police officer and the nature of operational policing.

8.6 CONCLUSION

This chapter has drawn together the research findings for all three phases of data collection for this study. The five research questions have been discussed in the light of educational programs delivered in the distance education mode and have been used to organize the chapter. Discussion about Research Question 1 centred on factors that encouraged officer participation in the MDP, factors that discouraged participation, factors that might affect an officer's performance, factors that might influence an officer's termination of study and factors related to the provision of student support for officers.

Discussion has been provided about the selection of the seven areas that formed the basis for scale development and resulted in the 7 scales of In-service Professional Development, Policing as a Profession, MDP Success Potential, Clinical Program Delivery, Student Support, Officer-Staff Member Discourse and Emotional Support that addressed Research Question 2.

Discussion has been provided in relation to Research Question 3, which considered the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP. Characteristics considered were gender, age, whether an officer had dependent children or not, rank, type of duty performed, highest educational level attained and geographic remoteness.

Research Question 4 asked if a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP could be developed. Discussion of a model that illustrated that an officer's success potential in the MDP was influenced by the variables of highest educational level attained, rank, dependent children and geographic remoteness has been provided.

Phase 3 of the data collection process for this study addressed Research Question 5 and relates to the implications of the study for enhancing the delivery of the MDP. Discussion in this section centred on the seven scales as outlined in Chapter 7. Discussion was based on the perceptions of the manager of the MDP and the head of the School of Management who were interviewed about the data provided by the 475 officers who completed and returned the questionnaire that formed Phase 2 of the data collection process for this study.

Chapter 8 serves as a basis for Chapter 9 of this study that provides a summary, implications, recommendations and limitations of the research.

CHAPTER 9

CONCLUSION: SUMMARY, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS

9.1 INTRODUCTION

This chapter concludes the thesis by addressing four important areas. Section 9.2 summarises the study by considering briefly its purpose, research methods, structure and key findings. Section 9.3 considers the discussion of Chapter 8 and identifies the important implications of the study. These implications focus on two main areas. The first relates directly to the delivery of the MDP and the second to members of the Senior Executive of the QPS who sponsor the MDP. A specific section to address implications for members of the Senior Executive of the Queensland Police Service is warranted because this body is responsible for the strategic direction of professional development within the QPS. These senior members of the QPS influence an officer's decision to undertake professional development. Also, recommendations of the study for the MDP are provided in Section 9.3.1 and recommendations for members of the Senior Executive of the QPS in Section 9.3.2. Section 9.4 summarises these recommendations. Section 9.5 addresses the limitations of the study. Section 9.6 suggests areas for further research. Concluding remarks to this thesis are provided in Section 9.7.

9.2 SUMMARY OF THE STUDY

The focus of this study is a program of management development offered in the distance education mode for officers of the QPS at the ranks of senior constable, sergeant and senior sergeant. Literature for this study was drawn from the fields of distance education and learning environments with an emphasis on the adult learner. The purpose of this study was to determine the factors that influenced participation and performance of officers who

undertook the program. Pursuant to this goal, a series of five research questions were defined. As detailed in Section 1.2.2 of Chapter 1 of this thesis, these research questions were addressed using qualitative and quantitative research methods.

The research questions addressed in this thesis were:

Question 1: What are the key factors that influence participation and performance by officers of the QPS undertaking the MDP by distance education?

Question 2: Can valid scales to assess the factors that influence participation and performance by officers undertaking the MDP be developed?

Question 3: What is the relationship between an officer's characteristics and the factors that influence participation and performance in the MDP?

Question 4: Can a model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP developed?

Question 5: What are the implications of the study for enhancing the delivery of the MDP?

A research methodology employing three phases of data collection was developed for this study. The first phase of data collection was designed to answer Research Question 1 and was based on a qualitative approach. Perceptions of six facilitators who were interviewed during Phase 1 provided answers to Research Question 1. Data based on the perceptions of facilitators were collected about the factors that encouraged officers to participate in the MDP, factors that discouraged officers from participating in the MDP, issues that might affect an officer's performance in the MDP, possible reasons an officer might terminate his or her enrolment in the MDP and the factors that must be addressed with regard to providing support for officers in the MDP as outlined in Chapter 3 (Section 3.3.2.1). An analysis of these data based on the perceptions of facilitators of the program resulted in the

identification of five areas of responses related to In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support and Clinical Program Delivery. These areas subsequently provided the basis for the scales that were developed for Phase 2 of data collection for this study, and contributed to answering Research Question 2 about whether valid scales could be developed to assess the factors that influenced participation and performance by officers undertaking the MDP.

As well as answering Research Question 2, another purpose of Phase 2 of the data collection process was to answer Research Questions 3 and 4 as outlined above and a quantitative method was employed, as outlined in Chapter 3 (Section 3.3.2.2). A tentative questionnaire was developed based on the five scales that were developed from the data collected during Phase 1 of this study. The purpose of Phase 2 of data collection was to assess officers' perceptions of the MDP. Officers who had completed at least one unit of the MDP were asked to respond to a questionnaire that assessed the factors that influenced their participation and performance within the program. A pilot study using a tentative form of the questionnaire was conducted with a target sample of 50 police officers who had completed at least one unit of the MDP. A total of 31 questionnaires were returned. Checks were made on internal consistency of scales and modifications were made by removing items that did not correlate with the remaining items in the scale. As discussed in Chapter 3 (Section 3.3.2.2) the wording of several items was also changed to enhance clarity of an individual item or to improve the scale.

Following the pilot study, two additional scales were incorporated into the design of the questionnaire. As reported in Chapter 3 (section 3.3.3.2), these were Officer-Staff Member Discourse and Emotional Support and were adapted from The Metacognitive Orientation Learning Environment Scale – Science (MOLES – S) (Thomas, 2002). These two scales were considered important for gaining information from police officers about their learning within the MDP and did not arise during the interviews conducted for Phase 1 of this study.

A total of 700 officers were invited to complete the questionnaire because that number was seen to provide a fair representation of the total number of 4200 officers who had

completed at least one unit of the MDP at the time of distribution of the questionnaire. A total of 475 officers completed and returned the questionnaire and this provided a return rate of 69%. This assured that a representative sample of police officers of the QPS had been attained. As explained in Chapter 3 (section 3.3.4.2) data for this study were analysed principally through the use of Multivariate Analysis of Variance (MANOVA).

To investigate Research Question 4 a strategy with two distinct stages was implemented. This strategy (see section 3.3.4.2) employed Principal Components Factor Analysis (PCFA) using the SPSS and Structured Equation Modelling (SEM) using LISREL 8.3 (Jöreskog and Sörbom, 1993). In the first stage, the factorial validity of each of the seven scales (viz. In-service Professional Development, Policing as a Profession, MDP Success Potential, Student Support, Clinical Program Delivery, Officer-Staff Member Discourse and Emotional Support) was explored using PCFA. The second stage of these analyses used these seven scales as variables in structural equation modelling. Specifically, the purpose of these analyses was to examine simultaneously the relationships among these seven variables and six of the seven grouping (or observed) variables in this study (viz. Gender, Age, Rank, Dependent Children, Highest Qualification and Geographic Remoteness). Evidence that Research Question 4 has been addressed has been provided by the model that provides a comprehensive representation of the relationships among an officer's characteristics and the factors that influence participation and performance in the MDP.

Phase 3 of this study was designed to address Research Question 5 as outlined above. An analysis of the data obtained from the questionnaire was used to inform the development of an interview schedule for these two interviews as outlined in Chapter 3 (Section 3.3.4.1). A qualitative approach was used for Phase 3 and interviews were conducted with the manager of the MDP and the head of the School of Management both of whom performed senior roles directly related to the delivery of the program. Implications for enhancing the delivery of the MDP were gained from an analysis of the data collected during Phase 3. Implications for the delivery of the MDP in relation to each of the seven scales relate to content of MDP, the need to provide effective learning support services, employment of

qualified facilitators, professional development for facilitators and the marketing of the importance of professional development for all officers.

With regard to gender, there are not any significant differences between the perceptions of females and male officers about the scales In-service Professional Development, Policing as a Profession, MDP Success Potential, Clinical Program Delivery, Student Support, Officer-Staff Member Discourse or Emotional Support. Female officers are slightly more positive than their male colleagues in relation to In-service Professional Development. With regard to the relationship between age and the factors that influence participation and performance, there are not any significant differences among officers in each of the four age groups in relation to any of the seven scales. While the effect size was small, those officers who are responsible for dependent children are slightly more positive on every scale than fellow officers who do not have dependent children. There are only significant differences with Clinical Program Delivery and Emotional Support scales. There are significant differences in relation to all seven scales between the ranks of senior constable, sergeant and senior sergeant. Senior sergeants are consistently more positive than sergeants, and sergeants are consistently more positive than senior constables in their responses.

Differences between categories of type of duty performed are significant and results indicate that those officers whose duty is in the administration/managerial category scored significantly higher on all seven scales than officers whose duties are in the other three categories. Differences are not significant for officers in the categories of uniform general duty and plain clothes, and both these groups scored consistently lower than the other two categories of administration/managerial and specialist duties. Those in the specialist category scored lower than those in the administration/managerial category. With regard to highest educational levels attained by officers, it is clear that those officers who have completed undergraduate or postgraduate qualification are consistently more positive in their responses on each of the seven scales. With regard to geographic remoteness officers in the four geographic groupings scored consistently on all seven scales.

The second set of findings presented is based on those responses by officers to the seven scales that relate directly to the context for or delivery of the MDP. In relation to In-service Professional Development, many officers are not aware of the benefits of undertaking inservice professional development, such as the MDP, for personal or organizational gains and some officers enrol in the program only to be eligible for promotion. Responses indicate that senior officers of the QPS do not overtly support the MDP. Significant numbers of officers do not believe that undertaking the MDP would assist either their professional development as a manager or their career development generally. Responses within the Policing as a Profession scale indicate that the QPS has not assisted many officers to perceive policing as a profession. Many officers do not appreciate the importance of professional development to the professional status of policing. Many officers have not been prepared, and are not willing, to study at the level required.

While many officers need support from the MDP to be successful, not all officers are prepared to utilise student support services such as orientations, telephone tutorials, face-to-face tutorials and assignment-writing workshops. Some officers believe many facilitators do not demonstrate a positive attitude to the provision of learning support and the feedback provided on assessment items by facilitators does not assist their learning. In relation to the Clinical Program Delivery scale, the distance education mode of delivery suits the learning style of some officers. Many officers find the learning guides and materials difficult to follow. As noted in the Officer-Staff-member Discourse scale many officers feel they could not engage with facilitators of the program about their learning. Low positive response rates in relation to the extent to which officers feel supported in their learning of management are noted for the Emotional Support scale.

9.3 IMPLICATIONS OF THE STUDY

In the previous chapter the five research questions posed for this study were discussed. The purpose of the present section is to highlight the key implications of this study for staff responsible for the delivery of the MDP and the members of the Senior Executive of the QPS and to suggest methodological and substantive directions for future research related to

the delivery of continuing education and professional development programs in the distance education mode for police officers. Whereas the discussion in Chapter 8 dealt with questions about each of the three phases of this study, this section attempts to synthesise the findings to form some recommendations. There has been no attempt to include all of the findings in this synthesis. Rather, an emphasis is placed on those results for which possible initiatives on the part of staff of the MDP and the members of the Senior Executive of the QPS are evident. Recommendations for staff of the MDP are noted in Section 9.3.1 and recommendations for the members of the Senior Executive of the QPS are noted in Section 9.3.2.

9.3.1 Implications for Staff in Relation to Delivery of the MDP

As was outlined in Chapter 1 of this thesis, the MDP is the vehicle for the delivery of continuing education and professional development in the form of management education for officers at the rank of senior constable, sergeant and senior sergeant of the QPS. As derived from this study, implications for the delivery of such a program may be grouped according to categories related to marketing of the program to prospective officers or students, student support, learning materials, educational aspects of program administration and general aspects of program delivery.

Officers of the QPS are aware that completion of the MDP is mandatory for those officers who seek to be eligible to apply for promotion to a higher rank as per the Commissioner's Circular 3/1999 (Appendix 16, Human Resource Manual). While the need to undertake the program is communicated to officers, an implication for the delivery of any program of continuing education and professional development is to market the advantages for those undertaking such professional development. Officers who enrol in the MDP are provided with management knowledge and skills they will need when promoted to the next rank. Program organization in this way does not comply with Knowles' (1980) theory of andragogy and how it relates to an adult's need to know the material that is offered. Officers, particularly at the rank of senior constable have an operational focus to their employment and do not appreciate the value of the educational experiences they are

offered. For many officers the opportunity to apply the theoretical perspectives about management with which they are presented would not eventuate for several years and as a consequence, they lack an appreciation of the value the educational opportunity offered. Marketing the advantages to officers of undertaking such study and the benefits for their future would assist such officers to have a more positive attitude to undertaking the program. Findings from this study indicate that officers at the rank of sergeant and senior sergeant are more accommodating to the educational experiences offered because they can apply the learning to management roles. Recommendations listed in this section of the thesis relate to all personnel involved in the delivery of the MDP. Recommendation 1: MDP staff should market the advantages of officers undertaking study of management with regard to gaining professional knowledge and being prepared to assume responsibility when promoted.

Because officers generally are greatly influenced by those at higher ranks, an implication for the MDP is to capitalise on the positive responses of those officers who value the learning opportunities with which they have been provided. Responses of a qualitative nature within program evaluations provide valuable perceptions from officers who have undertaken the study. Educational institutions frequently use such comments when advertising courses and while the QPS does not seek enrolments in a similar way to higher education institutions, this would be a valuable avenue by which to market the benefits of undertaking the program. Recommendation 2: MDP staff should market the positive responses of those officers who value the opportunities with which they have been provided.

Undertaking continuing education and professional development is an inherent requirement for any member of a profession. As noted in Chapter 1 of this thesis, the need for change from vocational to professional status for the QPS, as with other jurisdictions throughout Australia, arose from the 1999 Conference of Australian Police Commissioners (Winzler, 2004). The introduction of the MDP is one initiative towards achieving that goal. Requirements for achieving professional status for policing must be communicated to all members of the service. As well it is imperative that officers understand the benefits to the

individual and to the service of all officers engaging in continuing education and professional development, and such benefits have been documented by Vicere (1996), Conger and Xin (2000), and Myrsiades (2001). To achieve this status such benefits must be marketed. Recommendation 3: MDP staff should market the benefits to the individual and the organization with regard to undertaking continuing education and professional development.

An implication for any postgraduate program of professional development provided by an employer is, if appropriate, to link the program to a formal qualification offered by a university. The MDP has negotiated articulation arrangements with five Australian universities who give credit for the three Management Development units toward a postgraduate qualification in business management or an associated degree. An implication for the MDP is to market the articulation arrangements that have been negotiated. *Recommendation 4: MDP staff should market the articulation arrangements that exist with 5 participating Australian universities.*

Historically, the QPS is a rank-structured para-military organization and as such senior officers have control over the daily activities and influence the attitudes of subordinate officers. Because many senior officers of the service had achieved commissioned officer rank before the introduction of the MDP, they have not been required to engage in any compulsory form of management education. As the research findings indicate, many senior officers do not support the introduction of the MDP and many officers feel their superior officers do not support their study. An implication for any professional development program is to have senior members of the organization overtly support the learning experiences of more junior members. An implication for the Manager of the MDP is to ensure senior officers understand the reasons for the introduction of the program and the nature of the content so that they may support their subordinates for whom completion of the program is mandatory if they seek to be eligible for promotion.

Recommendation 5: MDP staff should market the philosophy and content of the MDP to senior officers to seek their active support for subordinates who undertake the program.

The high attrition rate for the MDP could, in part, be attributed to the nature of an operational police officer's role and the difficulty an officer could face with meeting due dates for assignment submission. Flexibility in program delivery is imperative when delivering programs to adult learners and administrators of the MDP must support learners with their study. *Recommendation 6 is that MDP staff should market the policy of flexibility in relation to submission of assessment items*.

The second category of implications for this study relates to learning support. Many officers who enrol in the MDP do not have undergraduate qualification and as a consequence experience considerable difficulty with the educational requirements that are commensurate with postgraduate programs. The provision of academic support for learners engaged in any professional development program must be inherent in any delivery strategy just as it is in the program in this study. Considering the evidence that exists from researchers such as Karabenick and Knapp (1991), Newman and Schwager (1995) and Ryan and Hicks (1997) about learners being unwilling to seek assistance from facilitators, an implication for the delivery of any educational program is to encourage officers to avail themselves of the assistance available. *Recommendation 7: MDP staff should encourage officers enrolled in the program to utilise learning support services*.

Many police officers cope with complex criminal and operational matters in their daily roles and are required to prepare complex written documents. Some officers do not have experience in academic contexts and experience difficulty coping with the requirements of academic writing. An implication for the MDP is to assist such officers to make the transition to academic writing while using the complex thought processes they employ in operational policing contexts. Recommendation 8: MDP staff should assist officers with the transfer of analytical skills in relation to complex criminal and operational matters to the study of management.

As has been noted, many officers who were compelled to enrol in the MDP had not undertaken formal academic study at undergraduate level and had not studied in the distance education mode. In addition to Recommendation 7, which relates to the provision

of learning support services, support to assist those officers to accommodate to study in the distance education mode is also required. This implication is supported by the research findings of Chacon-Duque (1987) who found that many students were not confident in learning in distance environments. *Recommendation 9: MDP staff should provide specific support to assist officers to study in the distance education mode.*

The third category of implications for this study relate to learning materials that are provided for each learner. As Hoover and Mader (1990), Marlow and Beagle (1996) and Raine and Wilson (1993) note there are many similarities between a police manager's role and that of private sector practitioners, and officers would benefit from the content of management programs having a broad public sector focus. Because the study of management is relatively new to the QPS and the program has not been widely accepted, findings of this study indicate that ensuring the relevance of the content to policing contexts is more appropriate than providing generic material related to management theory and praxis. Recommendation 10: MDP staff should ensure appropriateness of the content of learning materials.

In accordance with Delling (1996) who placed emphasis on the concepts of feedback and two-way communication for educational programs in the distance education mode, an implication for instructional design techniques for the MDP is to ensure that the learner is engaged through the way the materials are presented. A further implication is to ensure that the language used in the material acknowledges the background learning experiences of the learners, many of whom do not have graduate qualification. Recommendation 11: MDP staff should ensure that instructional design techniques that engage the learner are included in the learning materials.

The fourth category relates to general program administration and the marking of assessment items. Part of the learning experience in any educational program is derived from the feedback a learner receives on written assessment. Within programs delivered in the distance education mode effective feedback that stimulates learning is a very important consideration and a recommendation for the delivery of the MDP. *Recommendation 12:*

MDP staff should ensure that all assessment items are marked in a way that provides learning and enrichment for officers.

The fifth category of implications relates to program administration. A specific implication relates to the provision of orientation programs in officers' workplaces to assist officers to understand the administrative and educational requirements of the program. A further service is the provision of assignment-writing workshops to assist officers who are not experienced with academic writing. In addition, the use of technology in the form of telephone or video links for tutorials is recommended to assist officers' learning and to meet the requirements of the course. *Recommendation 13: MDP staff should provide orientation programs, assignment-writing workshops, and telephone or video link tutorials to support officer learning.*

9.3.2 Implications for Members of the Senior Executive of the Queensland Police Service in Relation to the Delivery of the MDP

Implications for the members of the Senior Executive of the QPS relate to the categories of marketing, human resource provision, and the level at which the MDP is offered.

Because the MDP was developed to assist the QPS to achieve its goal of moving from vocational to professional status and to comply with Fitzgerald's (1989) recommendation for the provision of management education for officers, it is imperative that officers of the service who are required to engage in continuing education and professional development if they wish to be eligible for promotion understand the importance of such development from a personal, professional and organizational perspective. Recommendation 14: Members of the Senior Executive should market the importance of officers engaging in continuing professional education from a personal, professional and organizational perspective.

While officers of the QPS have a strong operational focus, it is also imperative that effective management practices support the functions of the organization, as with any department or agency of the public service. This understanding must be communicated to

all officers at all ranks. Recommendation 15: Members of the Senior Executive should market the importance of sound management practices to officers at all ranks of the service.

Because of the influence the Queensland Police Union of Employees exerts over its members generally, it is imperative that the QPS engages in dialogue with the QPUE to promote the benefits to the individual and the organization of officers engaging in management education. Recommendation 16: Members of the Senior Executive should market the advantages of officers engaging in management education to the Queensland Police Union of Employees.

The second category of implications relates to the provision of human resources for the delivery of the MDP. As has been explained in Chapter 8 of this thesis, facilitators of the MDP are both police officers and civilian staff members. While civilian staff members have been employed because of their qualification and experience in management and education, police officers employed as facilitators are promoted on merit to the program, but are not required to have postgraduate qualification and are required only to have completed the relevant units of management education for promotion. While some officers do possess postgraduate qualification, many officers do not. *Recommendation 17:*Members of the Senior Executive should ensure that all facilitators who are employed within the MDP have the qualifications and experience to perform in their respective roles.

Recommendations 7, 8 and 9 in the previous section relate to the provision of student support. Because many officers who enrol in the MDP have specific needs with regard to accommodating to postgraduate study and study in the distance education mode, it is imperative that sufficient numbers of facilitators are employed by the QPS to provide the level of service and individual attention that was required. *Recommendation 18: Members of the Senior Executive should ensure that numbers of facilitators employed within the MDP allow for the provision of the specific learning support services that are required to ensure the academic learning needs of officers can be met effectively.*

A third category of implications relates to the level at which the Management Development is offered. The MDP is offered at postgraduate level and many officers who enrol in the program have not completed an undergraduate degree and have difficulty coping with the level of academic reading, writing and reasoning required. *Recommendation 19: Members of the Senior Executive should review the level at which the program is offered to determine if the current postgraduate level is the most appropriate.*

9.4 SUMMARY OF RECOMMENDATIONS

9.4.1 Recommendations for the MDP

Recommendation 1: MDP staff should market the advantages of officers undertaking study of management with regard to gaining professional knowledge and being prepared to assume responsibility when promoted.

Recommendation 2: MDP staff should market the positive responses of those officers who value the opportunities with which they have been provided.

Recommendation 3: MDP staff should market the benefits to the individual and the organization with regard to undertaking continuing education and professional development.

Recommendation 4: MDP staff should market the articulation arrangements that exist with 5 participating Australian universities.

Recommendation 5: MDP staff should market the philosophy and content of the MDP to senior officers to seek their active support for subordinates who undertake the program.

Recommendation 6: MDP staff should market the policy of flexibility in relation to submission of assessment items.

Recommendation 7: MDP staff should encourage officers enrolled in the program to utilise learning support services.

Recommendation 8: MDP staff should assist officers with the transfer of analytical skills in relation to complex criminal and operational matters to the study of management.

Recommendation 9: MDP staff should provide specific support to assist officers to study in the distance education mode.

Recommendation 10: MDP staff should ensure appropriateness of the content of learning materials.

Recommendation 11: MDP staff should ensure that instructional design techniques that engaged the learner are included in the learning materials.

Recommendation 12: MDP staff should ensure that all assessment items are marked in a way that provides learning and enrichment for officers.

Recommendation 13: MDP staff should provide orientation programs, assignment-writing workshops, and telephone or video link tutorials to support officer learning.

9.4.2 Recommendations for Members of the Senior Executive of the QPS in Relation to the Delivery of the MDP

Recommendation 14: Members of the Senior Executive should market the importance of officers engaging in continuing professional education from a personal, professional and organizational perspective.

Recommendation 15: Members of the Senior Executive should market the importance of sound management practices to officers at all ranks of the service.

Recommendation 16: Members of the Senior Executive should market the advantages of officers engaging in management education to the Queensland Police Union of Employees.

Recommendation 17: Members of the Senior Executive should ensure that all facilitators who are employed within the MDP have the qualifications and experience to perform in their respective roles.

Recommendation 18: Members of the Senior Executive should ensure that numbers of facilitators employed within the MDP allow for the provision of the specific learning support services that are required to ensure the academic learning needs of officers can be met effectively.

Recommendation 19: Members of the Senior Executive should review the level at which the program is offered to determine if the current postgraduate level is the most appropriate.

9.5 LIMITATIONS OF THE STUDY

This study has several limitations. Officers who wish to be eligible for promotion within the QPS are compelled to undertake specific units of the MDP on which this study was based. Findings, therefore, from this study cannot be generalized to other programs of management development offered by institutions where enrolment is voluntary. In most educational programs students enrol because of intrinsic motivation to learn and to gain educational qualification and not only because completion of the program is mandatory for career progression.

In addition, at most tertiary institutions, students who enrol are required to have prerequisite qualification prior to engaging in study at the postgraduate level. Within the MDP the only entry requirement, as outlined in Chapter 1 of this thesis, was that an officer had to be at the rank of senior constable, sergeant or senior sergeant to enrol in the

respective units. Completion of the MDP does not result in a formal qualification although the units are recognised by five Australian universities with which the QPS has negotiated articulation arrangements. The program is one of professional development offered as an in-service program and it is not possible, therefore, to generalise the results to other formal programs of qualification at postgraduate level.

With regard to the sample of officers who responded to the questionnaire it is possible that some officers responded because they wanted to use completion of the questionnaire as a vehicle to convey their dissatisfaction with having to undertake such professional development, and as a consequence, their responses would have reflected such negative attitudes. As outlined in Chapter 3 of this thesis, although anonymity was assured for participants, it is also possible that some officers who were invited to complete the questionnaire chose not to respond because of fear of being identified. This factor may have contributed to bias in the data that were collected. Although the MDP is offered in the distance education mode, materials are distributed in hard copy and on-line delivery techniques are not employed because not all officers have access to private computer facilities. Research findings from this study are therefore not generalisable to educational programs delivered on-line.

Data collection for this study embraced a three-phase approach and this was outlined in Chapter 3. Qualitative data in the form of six semi-structured interviews, collected as Phase 1 were used to inform the development of a questionnaire that formed Phase 2 of the process. Similarly, data from the questionnaire were used to inform Phase 3 where qualitative techniques in the form of semi-structured interviews were again employed. While this process could be used in a replication study, this research has specifically focussed on the officers who had completed at least one unit of the program, facilitators, the head of the School of Management and the manager of the MDP. The research instruments were developed specifically for this study and would not have direct applicability in other educational contexts.

9.6 AREAS FOR FURTHER RESEARCH

Suggestions for further research are related to the key stakeholders of the MDP and include the QPS, officers of the QPS at the ranks of senior constable, sergeant and senior sergeant, commissioned officers of the QPS and facilitators of the MDP. Areas for further research are based on replicating the current study, determining the perceptions of commissioned officers about the program, determining the return gained from the investment in the program or if an external agency could deliver the MDP more effectively. Assessing the appropriateness of the postgraduate level at which MDP is offered, and determining if the current distance education mode of delivery is the most appropriate are additional projects. Determining the learning needs of officers enrolled in the program could also be explored, as could the professional development needs of facilitators engaged in the MDP.

The current study was commenced in 2000 and this study could be replicated with officers who are currently enrolled in the MDP to determine if the factors that affect participation and performance of officers currently enrolled in the program differ from the findings of this study. As well, a research project conducted with commissioned officers of the QPS would determine their perceptions of the importance of management education for officers at the ranks of senior constable, sergeant and senior sergeant. As this current study demonstrated, the perception of many officers who responded to the questionnaire in Phase 2 was that senior officers of the QPS do not support their study of the MDP.

A *Return-on-Investment* study for the MDP would determine the benefits to the QPS of the financial outlay committed to deliver the program. A further study that also considers financial issues of the delivery of the MDP would determine the cost effectiveness of the QPS continuing to offer professional development in management education as opposed to sub-contracting the delivery of the MDP to a university. Another study related to the MDP is to determine if the postgraduate level at which the MDP is currently offered is the most appropriate for officers who do not have an undergraduate degree. A study to determine if delivery of the MDP in the distance education mode is the most effective would also be valuable. A recommendation of this current study is for enhanced services to support the

learning needs of officers and a study conducted to determine how officers' learning needs could be met most effectively would provide valuable data to support the introduction of additional learning support strategies. With regard to facilitators of the MDP, a recommendation of the current study is to provide professional development for those who delivered the MDP. A study to determine facilitator needs for professional development would be beneficial as it would illustrate clearly the nature of development required to assist facilitators to enhance the delivery of the MDP.

A total of eight areas for further study have been identified. Consideration could be given to all areas by members of the Senior Executive of the QPS when considering strategic planning for continuing education and professional development. All areas for further study are related directly or indirectly to the delivery of the MDP.

9.7 CONCLUDING REMARKS

Commissioner Fitzgerald's (1989) vision for reform of the QPS resulted in the implementation of the MDP in 1996. The introduction of management education for officers of the service was part of a world-wide trend to professionalise police services. The MDP may be linked to the work of Vollmer, who as Hudzik (1978) noted, initiated the movement to professionalise police services when he proposed a 36-month college-level program for police education in the United Kingdom in 1917. Vollmer's work was supported, as Sherman (1978) notes, by the National Advisory Commission on Higher Education for Police Officers and the goal of police reform movements since the 1940s has been to professionalise police services. Fitzgerald was supported by writers including Bennet and Hikenstad (1973), Dale (1984), Geller (1985), Greenhill (1981), Johnson (1972), and Reader (1966) who subscribed to certain characteristics of a profession, and have addressed professionalism within a policing context.

The central purpose of this study was to determine the factors that affected the participation and performance of officers who had completed at least one unit of the MDP. This program had been in operation for four years when this study commenced and it was timely

then to consider such factors. Research findings from the study will provide a valuable resource for all stakeholders of the program including the QPS, the manager of the program, the head of the School of Management and the facilitators of the program as no prior research about the program had been conducted.

Research outcomes from this study relate to the delivery of the MDP specifically and to the delivery of continuing education and professional development programs in the distance education mode as sponsored by the QPS. It is clear that the recommendations made by Commissioner Fitzgerald (1989) regarding the provision of management education have been implemented. This research, however, has shown that there are several issues that should be addressed in the interests of enhancing outcomes for officers and the QPS. These issues relate to marketing of the program to officers of the service, the provision of learning support, the nature of the learning materials, program administration both educational and general, the provision of adequate human resources to deliver the MDP and the level at which the program is offered. Recommendations about these issues have been made in this thesis.

Of all the issues that this research has raised, two clearly impact on the delivery of the program and will be specifically highlighted in these concluding remarks. Consideration must be given to the postgraduate level at which the program is set. As Knowles' (1990) theory of andragogy illustrates, the background learning experiences of adult learners must be taken into account when planning an educational program. Research findings from this study indicate that many officers experience considerable difficulty with the postgraduate level at which the program is set and require considerable learning support to compensate for their lack of academic experience. More meaningful learning experiences could result from a program of management education set at undergraduate level commensurate with the academic experience of many officers. The current program could remain and be made available to those officers who possess undergraduate qualification and nominate to study at postgraduate level. Because the content of the program is related directly to the roles and responsibilities of officers at the rank of sergeant, senior sergeant and inspector the content

could remain the same but the supporting information could be developed for an undergraduate audience.

The second major issue relates to the qualification of facilitators employed to deliver the program. While the employment of police officers within the MDP is valuable for understanding the operational aspects of a police officer's role, it must be considered mandatory that officers, who are employed as facilitators, possess qualifications in management at postgraduate level as required for staff members who are employed by the QPS.

As a theoretical foundation for this study, the four categories of distance education theories, Independence and Autonomy, Industrialisation, Interaction and Communication and Equivalency Theory as discussed in Chapter 2 of this thesis, provided a basis for a contextualisation of the delivery mode of the MDP. Further, as indicated in Chapter 2, the study of adult learning environments is a relatively young field. It is clear that there was limited knowledge about the interrelationships between formal learning environments and adult behaviour and experience, particularly with regard to learning in the distance education mode. It was shown by Wapner and Demick (1991) that the study of learning environments was related to the ways in which physical, interpersonal and sociocultural aspects of the environment affected, and are affected by an individual's behaviour and experience. Further, as Ennis et al. (1989, p. 76) note educational climate "represents the social and contextual qualities of an organization as perceived by the participants." The research conducted for this thesis contributes to adult learning environment research through the examination of the social and contextual qualities of the MDP as perceived by the facilitators, head of the School of Management, manager of the program and officers who undertook study within the program.

The very essence of the MDP is the uniqueness of the program and the opportunities that exist because of that uniqueness for this initiative of the QPS to meet the personal and professional needs for management education for its officers, as well as the organizational needs of the service. Recommendations in this thesis provide the basis for enhancement of

the delivery of the program and the subsequent potential for officers to contribute even more significantly to a vibrant QPS whose vision statement is "We are determined to be a professional police service, dedicated to excellence and committed to working in partnership with the people of Queensland to enhance the safety and security of our community" (QPS Strategic Plan 2001-2005, p. 1).

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APPENDIX A

INTERVIEW SCHEDULE - PHASE 1

- 1. Factors that encourage officers to participate in the MDP.
- 2. Factors that discourage officers from participating in the MDP.
- 3. Issues that may affect an officer's performance in the MDP.
- 4. Reasons why an officer may terminate his or her enrolment in the MDP.
- 5. Factors that must be addressed with regard to providing support for officers enrolled in the MDP.

APPENDIX B

SIX SEMI-STRUCTURED INTERVIEW TRANSCRIPTS FOR PHASE 1

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 1 - PHASE 1

What factors do you think encourage officers to participate in MDP?

Well, I think just from what I have seen that students feel compelled to complete their MDP for promotion. Unfortunately that seems to be the predominant reason why they do it.

Is there anything else you can think about? You have spoken about the compulsory nature, and that it is an industrially-driven program. Do you think that because they get articulation with universities that that encourages them at all?

I think for the minority, yes. Unfortunately another feeling that I get is that for many people who do that, they may not be the people who are thinking of staying with the QPS for too long and are looking at ways so that their future is quite secure once they leave.

So they are looking at skills they can take with them?

Yes, skills that are recognised by the business community.

What about the perception that officers have of MDP?

When I was speaking to a Senior Sergeant about that outside of work, he was actually very positive about MDP, but that could be because of his rank and because he is a senior sergeant he was very focussed. I think it may be less positive with some of the senior constables and I have met with some students at an Assignment-Writing Workshop and one of the things they discussed with me was that for them MDP was a way to set up a barrier to ensure that not so many people get promoted.

Do you think that many of the officers see having management education as important for their role?

I had a look at some of the feedback that was coming back through the Internet and that does not seem to be the case. They argued that some people had trouble seeing

that management was an important part of policing. They wanted action type things, and considered management rather than human resource management.

The second question – what factors discourage students from participating in MDP?

I did a station visit a few weeks ago and one of the Sergeants there mentioned that he did not think he was going to be promoted, and he was about in his fifties. He said there was no point for him in doing MDP, because at the most he was going to hit senior sergeant but he was happy to stay at the sergeant level, and he was hinting that appearance had something to do with promotion, and he did not seem the type. He was your average copper, and was not interested in MDP at all.

What about the fact that the program is offered by distance education – do you think that affects students?

I am not sure about the students, actually I do not know how they view it, but certainly from a facilitation point of view, having it through distance education does have its down sides. And as a facilitator it is frustrating sometimes when you know you can get a point across to a student much more easily in the classroom than you can trying to do it on the phone, and you both have a copy of an assignment that has been marked by someone else, and sometimes the handwriting is not very legible.

What about the general attitude police officers have to education?

Um, I don't think too many officers are positive about education, unfortunately. Some are, but not so many.

If we look at the nature of police employment, it is task and operationally focussed, and they don't see the benefits of MDP.

Yes, I think the residential that is being organized would be a lot more palatable, particularly I know that the average copper would be interested in attending a residential.

Looking at the next one, what issues might affect an officer's performance in the MDP? What stops them from doing well? Or, what helps them to do well?

Um, for some people it is just pure laziness and unfortunately for most people who do not complete it they are provided with support, and I don't think it is possible to overemphasise the level of support they are given to the point where we may as well do the assignment for them and ask them to sign it. It probably would be faster. Because they get so much information in Management 1 and they get updates that almost join it together. It actually is easier, but they still have to put in much effort, but it is much easier than elsewhere. They don't fully utilise the support, but perhaps they prefer to spend time with their family and do not want to give up television.

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 2 – PHASE 1

What factors do you think encourage officers to participate in MDP?

I think the first reason is definitely promotion, and there is no denying that. In addition to that I think there is a desire to learn and to develop. People do have that and even the police have that, so even if you take the promotion aspect away I think there would still be a number of people interested in doing MDP and developing and learning. Also, I think there are many people who would be interested in learning about management and getting into a career in management, so even if they did not have a desire to learn for their own self-development, it would be more of a career move for them if you wanted to know how to manage people. And I think last on the list is access to uni. courses because many of them realise there are benefits in doing MDP and getting RPL.

Can we have a look at the factors which discourage students from enrolling in MDP.

I think a lot of them would be worried about time commitment, you know it is not just something that they can do lightly, although given the standard of work sometimes, I think some students think they can. But I think most people realize it will take a big chunk of your life and you do have to hand over a lot of your spare time. So the time constraints would be lots. For people obviously who are very busy at work it would be a major thing, but even people who have non-busy work, they are going to think they have to lose time from family life and so on, so I think that is a big part. Also I think fear of failure would be a really major thing, that people are simply afraid that they are going to find out that, you know, how awful they really are. That is a shame because everyone has to take baby steps, whatever we are learning, whatever we are doing and I think there would be a massive number of people who are afraid of doing it because they think they are going to fail and they set themselves up for that. Um, I think previous poor performance in academic work might also be a factor, so people who have never studied before, or if people have studied and not done too well. So on past record they say I am not too good at that, so I am not going to do it which is different to the fear of failure which is a psychological barrier whereas poor past performance may be a reality. They haven't done very well, so I am not good at this game. And also I think there would be some people who have no desire to develop within their career or within themselves, so they would think "I have better things to think about and I enjoy other aspects of my life".

What about continuity of learning and the fact that many of the people who enrol do not have an undergraduate degree?

Yes, I guess the most recent people would probably be those who didn't do very well at school, and chose not to go on to uni. and with the age of some people, then uni. was never an option, so they think "What on earth could be expected of me – they have no idea". They do not understand what it's all about.

What about the nature of policing activity. Do you think they really understand how important being able to manage is, or having a knowledge of managing is?

No, I think they probably, in my experience with a lot of organizations, what happens is people look at the managers and see what an awful job they are doing and they think what is the point of going to uni. because no one ever listens to it. And they are dead right. It seems no matter what you teach them they will do something differently, but actually most people do not know the difference between right and wrong. I think people think they will get by.

The fact that the program is offered by distance education – would that be an issue for some students?

Definitely. It makes it all the more terrifying, and you really are isolated. I mean I just don't like it, and I don't think it is a very good way of teaching. It is a good way to offer a service to a lot of students, but I think there will be some people who think "that's not for me".

Even though distance education techniques are incorporated into the material, it is such that facilitators are not going to reach everybody. That's why the residentials are so valuable.

So what issues might affect an officer's performance?

I think that the major factor people seem to use as a reason when they are asking for extensions or talking about their own performance is time available to study. It requires for them to sit down and really do some work, and not everybody feels they have the time to get to that. And I suppose a lot of operational people feel they are busy doing important work, and other work and they seem to think that everyone else is sitting around with their feet up on the desk reading their MDP books, and you know, and of course that is not true because every one is telling the same story, but it probably would make a difference. I think there are exceptions, and it must be tiring. I would hate to be doing it after work, and so time would be a massive factor.

Previous educational experience without doubt has just got to be – any experience of higher education would prepare people for MDP. Or even any – it is going to affect good or bad, what you do whatever your standard of education was at school will make a difference as to how good you are at MDP. Also I suppose intrinsic motivation. Not everybody is doing it for the reward of promotion or paypoint progression or whatever that might be. I think some people will do better because they are driven to do well and they do have an interest, and they are sitting there saying this is quite enjoyable and I am enjoying the work, and thinking about the ideas and learning, and that will impact on their performance. Writing skills – that is going to impact and that is also a sign of education in the broader sense – you know, writing skills will impact on the performance because as markers, if someone cannot communicate their ideas, we cannot give them credit for something that might be in

their head. I think it is hard to separate. How can I judge it if I cannot understand it?

What about an officer's attitude to MDP?

Oh yeah. That is going to happen. There are perceptions there that 51% is too much effort. And I have heard that, but I am not getting that from my students because Management 3 is different, and they feel they have more to prove in terms of the standard.

Do you think the facilitator might have something to do with that too?

No, I don't actually. It could have, but I don't have any clues that people have made more or less effort because of me. One interesting thing I went to a rejoiners' session, and it seemed to be reinforced that they did not really have to study and they could get out of it.

What about student support?

You can make such a big difference, and people who have failed, and I have worked with them on the phone and then they have submitted something that is brilliant. They put the effort in, and it is a shame that the resubmission policy is 50%. So facilitator support can have a major impact on performance.

What about the content of the material?

The content would definitely be an influence, but I would like to think about our assessment items, and I think we need to share the assessment items. We really need to open ourselves for scrutiny. Assessment items must link in with the material. Perhaps an officer's initiative is important too. We provide them with lots of articles, and some just want to be selective. Some want to read extra stuff. Students do need to be able to judge what is relevant.

What about an officer's personality? Do you think that might affect performance?

Yes, I see intrinsic motivation and it would fit in there, and do they gain satisfaction through bettering themselves, developing themselves. I should mention attention to detail and that would help in writing an assignment. Sometimes I use the analogy of a spray gun, students have leaned things and then they have just splattered the ideas all over the page, and you think there is some really good stuff there, and I wish I could make sense of it. Maybe we could add IQ to the list, and it doesn't mean we can exclude people who do not have a very high IQ, and that we should exclude people who do not fit into the category. We can still work with them.

So, why might an officer terminate his/her enrolment?

I think one of the reasons that they might drop out is failure. Like if they take a course and are doing ok, and then they are not happy with their results, and they might be off track, and if they have put in the effort, they might come away thinking how can I do it better, and they really think they haven't got anything out of it. And then there are people who do not put in the effort. So, failure would make a difference, but I think you can still bring some one back from the brink of failure. Some people would drop out for time reasons, and they do not want to, or can't give the time. Some people are dropping out because family members have taken ill.

Lack of assistance could be another reason – the perception of a lack of assistance. Facilitators are not always there, but we cannot always be there, if someone is working shift work, and if someone is in Mackay, we might not be able to respond as well as we could. But we could try. It is not always someone who has failed, and I suppose that I have found in Management 3 we did contact all our students. It is scary, and everyone who rings me for an extension has a story, and they think they are the only ones. I guess students can feel alone, and we call to make contact and tell them we want to help. Some take us up, and some are surprised when they get a response. If we cannot deal with a query there and then, we do make an effort to get back to students. We try to meet student needs and help one another. So this could make a difference if someone did want to terminate. They might just look at the assignment without reading it properly, and reading the updates and decide to cancel their enrolment.

Is the program offered at an appropriate level for all officers?

No. It could be lack of interest for many people. Some people might enrol and think it will be interesting and then they find out it is not.

What factors must be considered with regard to providing support for students enrolled in MDP?

I think it is absolutely essential that we are all very helpful at MDP as facilitators and that we genuinely care. I think everyone would say that is the case. We must not be afraid to show that we are interested, and that we want to encourage people to do well and to give us a call, and that nothing is too much trouble. They are too far away to get the idea that they are an inconvenience to us. Real, genuine help is essential. Everyone has to be in counsellor mode, use humour to encourage people and we are all willing to do that, and it is essential to provide support with the feedback they are getting on drafts and assignments, and that will help them to do well. I think commenting on drafts has been very good for some students and we do not have the bell curve and essentially it means that not all people can do very well. When people get feedback on drafts they do really well and we must identify areas of weakness.

What about the quality of emails and updates?

Yeah, that is very important, but I think quality is important. Updates cannot be too long, or students will not read it. There are only so many ideas anyone can take on at once, and perhaps smaller emails are better. It really is important that we can contact students at home, and we cannot do that we cannot contact them because we don't have external email. I also think face-to-face contact is important, and we should have more workshops with students. We can explain what the assignment is about, and this is how you go about it. I think it is important for students to be networking together. We know what students are going through with family, work etc. Tutorials are so helpful.

Students are spread geographically over the state. How could that be addressed?

Spend money on them.

What about the potential for video links?

I think that is not the ultimate but a move in the right direction – even a teletute like they used to have – that would be an excellent idea. Any sort of contact would be an excellent idea. A residential is an excellent idea.

What about a muster in each region?

Yeah – just to get people together. The fear of failure could be addressed. Everyone is lonely, and they are all in the same boat, and that could be pointed out. People need to be able to share lots of things, so study groups would be another way of doing that. Also mentoring would be good – students who have studied before could help others.

What about celebrating successes in each region?

That would be good. We need a recognition of achievement award. The program has an award for last semester's best student. That should encourage people.

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 3 – PHASE 1

What factors do you think encourage officers to participate in MDP?

The main reason students enrol is because it is now the requirement for them to do a course for promotion. So, if they want a promotion, they have, of course, got to successfully complete the course. I believe that that is the biggest motivator for them. There are a few students though, who appreciate the articulation arrangements that we have organized with other universities and so that would be a second factor which would encourage probably a minority, but there are some who have enrolled in units other than the ones that they really need to do for that reason. So I think that's the real reason why students actually enrol.

What about the transferability of skills. Have you spoken with any students who have said that they could use this to get a job elsewhere?

Not really because the majority I have spoken with really see a career in the Service. There might be one or two who see that as a benefit. I think as well that perhaps some are reasonably eager to do the second or third level because of positive experiences, if they have had a positive experience earlier. I think that there are some students who value what is being taught. I think that that is being backed up by the ones who have asked if they can enrol in a higher unit before they actually are promoted to that level. So I do think that there are some who having done this, do appreciate the information that they are being taught.

What factors discourage students from participating in MDP?

I think it is probably broken down into pretty definite areas. One, I think, is the attitude that is promoted by the Police unit itself and they have certainly bred a feeling of resentment amongst a lot of the officers. Because everything is essential for promotion, it has built up this resentment of they have to do it. So there is a resentful attitude amongst some who feel that they are hard done by, that they are having to study in their own time. That brings in the factor that the service has not provided time in the majority of cases, except the residential component. But all other study is being done in their own time. So that would discourage some of them because a lot of service courses are conducted in service time, or they do get some work time to carry out their studies. I think as well, the academic standards of the course discourage some. Because with the course being at postgraduate level, we still have some students who don't have an undergraduate degree, so they haven't got an academic basis to build on, so they find that the study is extremely difficult. I guess that there are also the ones who as adults, have not done a lot of study and therefore have had some of those fears that adult students do have when they first start studying. So it's perhaps a fear factor, and then not being able to perform to the accepted standard because they do not have an academic background - they do not have a degree. They are going to think it is a big factor.

What about preparation by QPS generally when you look at the stages through PROVE, First Year Constable, Constable Development Program, then onto MDP, do you think that there is some responsibility with QPS to prepare people more adequately?

Yes. Especially with the QPS setting the standards that they want the study to be at an undergraduate level with some of those other courses and postgraduate level with our courses. I think that QPS has a real responsibility to ensure that the courses that we adhere to at MDP really are at an undergraduate level and that those standards are being met, and that they provide and work more closely with those who haven't had the opportunity to do an undergraduate degree, and look at a general way of preparing them for the study that they are going to do through MDP.

A big factor that I think discourages students is that they never are going to appreciate how important management skills are in the workplace. The reason that they are going for promotion is that they want to become managers. But, there still seems to be a prevailing attitude that anyone can be a manager. They do not recognise that there is a whole huge body of knowledge out there about management. But, through studying, through discussion, they can examine their own management skills and development. I think there is a real lack of appreciation about that. They don't appreciate that the management strand of MDP is really providing them with a wonderful opportunity to develop some skills and understanding of those skills and behaviours and practices, which is just going to be so critical for the rest of their career, if they want promotion.

What about the method of delivery? Do think that that might discourage students?

Oh yes. Distance education discourages some as anyone who does not enjoy reading of course is going to be discouraged by that methodology and the fact that is the only methodology that we use.

Is there something that perhaps the program should be doing more to equip people with the skills that are needed? You have to learn how to learn with distance education. Do you think that MDP can do anymore with the resources that exist? If the program was resourced differently, do you think it would assist students if people were taught how to study by distance education?

Oh definitely. I think that it applies to MDP. There could be a much broader course offered by the Academy because I think that a lot of CDP is distance ed. as well. So yes, so it's not as if the Academy is doing it for just one program.

Looking at an officer's attitude to education generally, do you think that that could impact on whether they choose to enrol in MDP or not?

It could do. But there are a lot of officers out there who are more qualified. There are a lot who already have an undergraduate degree and a nominal amount with masters. In general, I think there is a reasonable percentage who have a positive attitude towards education.

What issues might affect an officer's performance in management, because the basis of what I am looking at now is their participation and how they can be helped to perform more actively, and how QPS can achieve its goal.

Well, first of all in regards to their academic ability or not, those who haven't studied or who have limited study, that of course is going to affect them because it's a whole new area for those who haven't experienced study before, and the fact that it is only a distance education course. It they haven't experienced tertiary education experiences in the classroom; it is much harder with this tertiary study being by distance education, so that certainly would have a big impact. I think another thing is – these

are the ones in that category – they have no appreciation of the effort and dedication that you have to have to do a postgraduate subject. So, that whole background I think is a big factor. I guess carrying on from that it is still in a more academic strand. I think as for – I'll talk about management one and two particularly – I think that the student-facilitator ratios that we have had in the past which have been, you know that's just been how it is, that that has definitely had an impact, because there have been such large numbers that students have not been able to, or facilitators have not been able to build up a rapport and relationship with students and even like its even really difficult to view that with the ones who are doing poorly. Because of the numbers, it impedes being able to track and really support the ones who really need the support. As well, I think there have also been problems with the standards, the inconsistency of standards in here and part of that is because of QPS policy and who they employ in the program. Because now everyone is coming from an academic background so students are receiving a lot of inconsistent feedback from those who do have an academic background. And that of course just creates confusion, frustration and the fact that we have to rely heavily in some units on outsourced markers who again don't necessarily carry the educational background that would be desired. I think as well, another factor that impacts on it with these inconsistencies, is the culture and strong resistance amongst the Police, to be too critical of other Police and I think that that is a major factor. I think that that's a problem as well. I know from my experience, the Police have marked other Police work and they have given them a pass mark and it's not at that standard of work.

Do you find that with more outsource markers than with internal markers?

Now it's more with outsourced markers. It used to be internal. But I think we are getting past that. And the other issue was an officer's work commitments. Some of the Police work in areas where, like they are working longer hours or whatever, if they are investigating things, you know they can be working and can be called on to do longer hours and of course home issues, but some of them have had some pretty horrific issues to deal to deal with and they still try and keep going.

Why do people drop out of MDP?

I think probably because of the amount of effort that is required, they don't realise that. I think that in the first place they don't have a general commitment to it anyway. I think that some of the problems are created by the Service itself. If they want acting at higher levels they can do it if they are enrolled. You know, they encourage us all to enrol but it doesn't encourage them to see it through. So, that's an organizational/internal thing and I think that a lot are just using the program for their own purposes, for that very purpose. I think as well, they don't have commitment. I think there a few who really struggle and the ones who do struggle, if they are prepared to communicate with us, which we have tried to be as open as we can be, well, they get all the support that they need. I do think that there are some that feel too embarrassed still, because they find it overwhelming or they haven't passed their first assignment, for example. It's all just too much and too

embarrassing to have to, they don't understand the educational process. They think it's a personal slant on them that we are here to assist them not to be judging them, and that our role is a support role, rather than a judgemental role. But they don't understand that and so, rather than facing up to something that they see as embarrassing it's much easier to just make contact after those sorts of results.

Would it be valuable if there was a dedicated student support officer here who could deal with those people who are very insecure academically?

If we could identify them, yes. I think it would be useful, yes. I mean, their role would obviously be as general student support rather than - because we just have to be careful that they didn't cause conflict between what they were telling them and what is being taught in the units.

One of the elements of attrition theory is that what happens to a student after he or she enrols is very important with regard to whether they drop out or not. I think with what is offered students have the opportunity to succeed. Can you see anything else that could be done within this program to make students feel more comfortable and to provide them with a more appropriate learning environment, a more positive learning environment?

Yes, there are things that we could do. I think that if we could, I believe that there needs to be more facilitator contact with the students. If we could somehow do that, well then, right from the very first week, so it would involve higher numbers of facilitators in those bigger units, so that perhaps phone contact could be made on an individual basis. I don't know if that would help or, if that's going overboard. That would help to establish some initial rapport with them and I think that that's been important because of the culture that we're dealing with. Yes we will have some that will contact us and like, I mean not just be sending out an email and invite them to contact – I still think that unless they have actually spoken with us, they don't appreciate that we are genuine in what we say. So there's that. But like I mean, I think as well as offering printed materials, we really need to see if other things can be done like tele-tutorials, with general visits, offering workshops and finding out from them, like just conducting some surveys and ask them about what support mechanisms they would have found useful rather than us imposing what we think would be beneficial. If we could get some formal feedback and some possible suggestions from them about this other support that they would have found useful. I mean, they all want student contact. I find that though, that that just makes a huge difference to have people respond. I think as well, we need to be always reviewing materials like there are some of those materials that desperately need updating, rewriting. We also need to really seriously look at what we are trying to do and remain focussed on what our purpose is rather than being at the whim of a range of people in the organization who want this little thing done or that little thing done and added into the course - which has been some of the problems that the courses have become far too much of a hotch potch, and its because of the pressure that has been put on to include some of those aspects into the course. So we need to ensure that our curriculum is focussed on what has been identified as what this course should be

providing. As well, we also need to keep in mind the element of curriculum, that it is a developmental course and that needs to be put across to the students as well that it is not necessary skills for their current job that its developmental, hopefully they can use some of it in their job, but it's also helping their career. We need to work on assessment as well. Perhaps it is not appropriate that the majority of our assessment and it's nearly in all of our assessment, is just straight essays. They have to look at how relevant the type of writing we are asking them to do, now ok it has to meet an academic standard, that's one part, but it also has to, well I believe that the writing that they are doing should be writing that would assist them in a work place society. So, that really needs to be examined and that's what I think as well, I don't believe that all of our assessment necessarily needs to be written in a work place, the higher they go, the more presentations they are going to be giving and I think that we should be factoring in that if and when we can.

Do you think QPS can help market MDP well?

Most definitely. That's definitely and particularly if their Union would get out of the dark ages and start realising that it is a normal practice in both public sector and the private sector for managers to undergo the management training, and a lot of private sector organizations have their own in-house management programs as well. You know, the Police are not being asked to do anything different from what the majority of people in the workplace these days are being asked to do if they want managerial positions.

What factors must be addressed with regard to providing support for students enrolled?

Well, I guess you always need to be looking at staff members and not just numbers, but qualifications. Appropriate numbers and appropriately qualified staff. That is an issue that needs to be addressed continually. I think we need to, in relation to that, I guess we need to look at the whole outsource marker issue and determine if that is really the most appropriate method of marking of their work, as well as some of the those things I have already mentioned to you. Look at providing more facilitator contact. How can you do that? I know that there are always budget restrictions, but can we introduce some type of tutorials. Can we, re-introduce regional visits and even, like I guess, looking at the assessment, looking at the curriculum all of those sorts of things.

Video linking?

Yes, that's right. Using whatever technology that's available for us to use. I think as well, that we need to look at some of our policies and just consider whether some of policies that we have are, like they could not be creating some of the problems through the policies that we have.

'Cause one thing that I have been thinking about, just with this marking that I have been doing again, being involved again at that level, now this sounds as if it's not

student support, but I believe that we are perhaps not setting the appropriate standards. One of those is like the number of submissions that, re-submissions that they can put in which they do. Basically, I believe, from the standard of work that I have been seeing that there are many people who do think that the first assignment is a draft. So in turn, it is creating heaps of extra work for the people of MDP and I think that if we had re-visited that policy and made it more stringent for the students, that they have one resubmission for the whole unit, we would get a group of people taking it a lot more seriously. Because, I'm saying this because some of the people who are handing in work of a very poor standard, are people who are doing undergraduate degrees. Now, I know that what they are handing in obviously then doesn't reflect their real ability. So, I think that that way, we could be cutting out, well we could stop wasting some of our time and then we have enough time to devote to the ones who never get any support, rather than wasting time. And, I think as well the same, just the same way as phone calls, I believe to look at what is actually happening in the amount of time that is spent on the phone. Because of the slowness of our turnaround times, the number of phone calls that we get just through people trying to find out how their assignment is going and whatever, if we had prompt return, we would be cutting out heaps of those calls. You know, like a lot of our time is being wasted because our processes are not efficient enough.

So, if the program had more people, there would be a faster turn-around time. And also, if people would take the work more seriously it would be better, because I imagine a fair few have a guilty conscious and that is why they are ringing up to get a result.

Yes.

So once again, QPS I think has a role to play too in supporting the program, and the concept of the program and that that in itself would play an effective part. Yes.

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 4 – PHASE 1

What factors do you think encourage officers to participate in MDP? Your opinion from a policing perspective, why basically people undertake MDP.

The primary reason they undertake MDP is for the possibility of promotion. A secondary one would be so that they can use it for pay point progression in terms of their 100 points. Another reason would be that they complete MDP because it's an inexpensive way of gaining some self-development for their resume. It doesn't cost them anything. The last way that they would do MDP would be for some self development where they might be thinking of enrolling in some tertiary study because they're concerned they are being left behind, so they enrol in MDP as a bit of a test case to see whether they like it, whether they can do it. And that would be, to my mind they would be the only reasons why people would enrol in MDP.

You don't think people look on MDP as gaining some qualification for leaving the service and getting a job elsewhere.

No. No I don't. I guess there's one that I left out. There would be people doing MDP to obtain RPL from tertiary institutions. For instance in our subject we have some Senior Sergeants doing it retrospectively to gain that RPL. But, from my dealings, that's a minority of cases.

What do you think discourages people? We have a lot of older officers who have never enrolled in MDP. What do you think turns them off?

The principle of having to do it. Although they don't have to do it, the fact that other people before them have got promoted and they haven't had to do it. The fact that the Service is, like I have been in the Police 11 years and it is constantly changing what you have to do to get your pay point progression to get promoted. I have been promoted twice, each time it was different in what requirements there were. What else discourages them from doing it? The amount of time. I think the number one thing that discourages people from doing MDP is not MDP itself, it's the fact that they are already loaded up with other things by the QPS in terms of working within their own time, whether they are on general duties, CIB or AIS. They already have a lot of demands on them, which are requiring them to work in their own time, and this is just another demand. If they were given more support to do their normal job, and told we will give you one day a month to contribute towards doing some study, I think the whole thing for MDP would turn around. I know a lot of Police and I know that they would rather sit down and do some MDP than work on the counter all day. If you gave them the choice, if they could come to a one day residential, or you can work on the counter, they would pick MDP every time. So its not so much anti MDP, we've already got more and more demands with less resources, and this is just another. This is the icing on the cake.

What about the attitude to management education? Do you think they see the importance of that if they are going to be managing people, that to have that background knowledge is necessary?

I think they recognise that its important and that it's going to assist them later on, but they can't get over the fact that they going to have to do the hard yards. They are going to have to do assignments, you know, for instance, say with the management 3 residential, fantastic positive comments, because assessment is not a major component of that. You factor in some pretty heavy assessment into that and see if you get the same positive feedback. I doubt whether you would. I think its just human nature that even though I know that this is going to be beneficial to me, it is still a bugbear that I have to complete so much assessment.

What about the fact that we offer – you've already sort of answered this – the fact that we offer by distance ed as opposed to you've mentioned like one day coming to the academy instead of being on the counter. Is distance ed. an issue here?

I think distance education is an effective way for Police culture. It is flexible in terms of the time that they can do it. It's flexible for whether they're in the stock squad away for a few weeks, or if they're in a remote location its effective. It's fair, right across the board. The exclusion of that I think would be covert operatives where they're disadvantaged.

So, should we be offering some sort of course that is preparation for learning how to study by distance ed. mode?

No, I think that most of the people already have the potential, you know they're already, a lot of them are writing in their every day lives and they're given a lot of assignment guides, student updates, in terms of the style of writing of MDP, the content of what's required, the amount of work you are going to need to do. I think that they are provided with enough there. The proof of that is that the majority of them are passing.

So what issues might affect an officer's performance while they are actually studying it? What stops them from doing really well?

Work commitments. There are a lot of the police in the state who are on call when they leave work, so that impacts on that. For instance, some stations are all single officer stations. I withdrew from MDP when I was at a single officer station even though I was committed to the program because it was impossible for me to complete it. I was at Myandra, which is just outside Cunamulla and it was very busy. So, it was impossible to be completed in the time. So, OK. What is it, the things that prevent people from doing well? I think work commitments are one. Family issues would be another. Genuine family issues where the, a fellow described MDP to me the other day as the marriage divorce program, where he's at the water police, he's on call a lot. He goes away a lot. Then when he's home, he's doing MDP. And it's just not very popular in that particular household. So you've got those things. They can affect the people that are committed to self-development, committed to getting it finished, and we have people deferring that say I genuinely don't want to defer, I genuinely want to get it done, I just can't. I guess that's unavoidable, but the other thing there would be a lack of commitment to wanting to do it. I think MDP could just about cure anybody of trying to do an assignment the night before, because there is just too much material to take in, it's just too difficult. If you really don't set aside some time to try and get an understanding of the material, you are not going to do well.

There is nowhere on earth that you can do a master's assignment the night before.

No, well that's right. But, a lot of these people I think... Based on some of the assignments that I see that are of poor standard, and I know them and know that they can write well, the only thing that says to me is that they've spent little time and attention to doing it. So, you can't force people's commitment. I think we are doing,

we are encouraging them as much as we can. And, in fact, I think that in some areas, it is over encouragement where, I see some big issues with the resubmission, the ability to resubmit every assignment, because it is the strategy of police to hand in a paper, I can't lose. It will either just pass, if it just fails, I'll have all the feedback there with ideas, so really I am better off. I can just address that and I can do that three times. We have students that, we've got one down there, four or five times, because they have failed an assignment, failed a resubmission, OK, next time comes round. Follow a similar, similar strategy. So I definitely would be, what discourages them from doing well is the fact that they can resubmit every assessment item because there is no pressure on them, no encouragement sorry, to. You have got to get it right or this is it.

Why do they drop out?

When they realise the amount of work involved, after the first assignment. You get a few drop out before the first assignment because of poor planning and you know, haven't done the preparation, realise the magnitude of the assignment, then you get ones that pull out after the first assignment because they get a worse result than what they thought they were going to get. I think that's a very complex one, why they pull out. I think that some of them, in terms of management one, we have swapped our module three and module one around, so instead of starting with policy, they start with contemporary issues in policing. That's sort of a, well ok, get them to complete one assignment, the chances are they will go on. But if they keep pulling out at module one, they're never going to do the other modules.

Do you think people having problems studying by distance ed. could cause some of them to drop out?

I think in terms of the Police, I think it's easier. I've studied both ways and I think it's easier in studying in distance Ed. Because you don't have to turn up at a lecture at 6.00 pm at night, start work at 9.00 pm and finish at midnight. You can wait and do it whenever you want. Ok, I wait to do any MDP study until I am on a day off, you know, after the kids go to bed at 9.00 pm, I'll do two hours then. It's totally, in terms of the updates, the student updates. They can save them up; they don't have to read them in the first week they get them. They can save a couple and then when they get some time. If they're only allowed to take rec leave between certain times, they can take it to try and finish MDP.

So you think that the sort of support that we offer to them, like with the updates, is a very positive thing?

Yes. I think it's more than positive. In fact there is a genuine reluctance for the student population not to contact the facilitators, no matter what strategy is employed. Management 3, I know that Trish did a ring around at the start of the semester, even though I threw off at her about it, I think that is very effective. Because, you know, it had positive results, but student numbers make the difference.

This leads in to the next one, what we need to address as far as providing for students. Making sure that the content of our program is right. You have already talked about it a little bit with changing the assignments around making it meaningful by making the first area that they study more operationally focussed. Are there any other things that we need to consider from a student support point of view?

Some variety in assessment. Perhaps a computer based exam. Even multiple choice. In terms of management one, I think that would be an extremely effective way to deal with the policy module because, where every semester we are having difficulties with the high failure rate in terms of the written assessment. The other thing I think in terms of student support and how it can be addressed is having an appropriate staff to student ratio. Because, when ideally, if we are going to have someone that is going to have difficulties, they might have been reenrol led from last semester, they might be failure management from one assignment, they might have had other personal issues that you know they are going to have difficulties. We have had people with degenerative eye disease, shoulder injuries, arm injuries where they couldn't type. Those people need extra time and extra attention and at the moment, the way we are travelling at the moment, if we select out every one of those that needs, ok we'll mark those particular assignments in-house, we can't keep up. So in the end, you have an assignment there, you pull it out of the pile, ok this one which should be marked inhouse, but we are just not in a position to mark it. We have to out-source it. I sent out papers yesterday that have failed previous assignments that are going to an outsource marker. That's definitely not the way I'd be doing it if I had the choice, and we had sufficient resources. I think that with increased numbers, to having more facilitators as opposed to having out-sourced marking would be better because you get the benefit of having the marker, that they can provide more student support. The external markers don't provide any student support. And when they fail a paper, they tell them to contact the facilitators so I get the paper, moderate it, send it out and next minute I've got someone contacting me saying can you help me with my paper. I've got to go back and re-read it all again. It's a clumsy system.

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 5 – PHASE 1

What factors do you think encourage officers to participate in MDP?

In respect of people wanting to participate, it seems that by and large that the primary driver is the fact that the program is linked to promotion and that without it, the chances of elevation within the organization are halted.

What about the fact that people get recognition at master's level?

I think the recognition as master's level is definitely a good thing so far as it being a driver for people wanting to actually enrol in the program, but to make that a primary driver, I would say "no". I think as a strategy to improve organizational

development, I think it's a great thing because basically if it is going to encourage people to expand their horizons through education, through further education, it can benefit the organization.

Do you think any officers actually enrol in MDP with the thought that they can be helped to be better managers through doing the program?

I haven't had any candid comments from people along those lines about their expectations prior to enrolling. I have had comments of that nature after the event and more often than not, it has been from people who have had very limited further education, who were quite frank in telling me that they thought they had nothing further they could learn. But, the concepts that were covered in the units that they had studied was able to give them a fresh view on things that are happening around them and so, therefore, their responsibility as managers. More often than not, there seems to have been a focus amongst most managers or most future managers that the responsibilities have been to themselves and not necessarily to people that they work for and with, and for the people that they have working for them. I don't know whether that has changed too much post MDP.

What factors do you think discourage officers from enrolling in MDP?

I think there are a number of factors there and the primary one is ignorance of the benefits of further education. There has been a general lift in the standards of education in recruiting, and we are seeing a number of those people starting to filter through the levels of MDP now. A lot of those people seem to feel that they have plateaued and that because they have been educated, that they don't need further education, that they don't need to keep on top of things and keep their skills current and knowledge current. Probably the other areas are lack of commitment at the personal level and particularly at the managerial and often executive level. Comments from people that are working in the regions do not indicate a high level of support at the executive level. I don't know whether the completion of MDP is rated very highly by a lot of managers who have a strong focus purely on current operational needs. There doesn't seem to be a future focus. There doesn't seem to be any significant gain for people who are looking for promotion even in being able to say that they have done exceptionally well in MDP study, and probably that comment can be applied to studies generally. I guess that it points to an organizational culture that is apathetic towards education and training. Probably more so education. They seem to be very focussed on training and it gets back to operational needs. There doesn't seem to be a great deal of strategic focus.

What about how people perceive MDP?

Even though the program has been around for about five years now, there are still some fairly resistant pockets where I know people who have made career choices based on the fact that they are not prepared to go through any further education. If you have a look at the types of attitudes that prevail in union correspondence, the

representatives on the ground are usually at or below the rank of sergeant and many are senior constables. Many of them have less that ten years service, so we seem to have a lot of attitudes from people who really are not necessarily that widely experienced. They don't have an extensive knowledge of all areas of the QPS. But when you combine that with what members of the executive are saying, the culture seems to be common throughout and getting change is difficult.

What about the delivery by distance education mode? Would that discourage some people?

I think that by being purely distance education, there is a problem. Some students have problems and to come to grips with foreign concepts and to pick up on finer details and to be in a position to talk through and debate certain issues, it is difficult.

What issues might affect an officer's performance in the program?

Probably cultural factors. I think one of the primary things is their level of commitment. Are they committed to improving themselves or are they looking at the MDP purely as a means to an end? Many people do not want to persevere and apply themselves to the various tasks they have got. Probably a few other things. On the responsibilities level, personal and professional responsibilities. Commonly, I get comments from people about what their personal responsibilities are, that they've got family issues to take care of. Professional responsibilities. I accept that is a legitimate call, but I don't know whether it could be at times, overused. Probably the last thing is it comes down to intellect. I think that given that MDP is pitched at a postgraduate level, we do have a lot of intelligent people within the QPS, but I don't subscribe to the view that the MDP is, that successful completion of MDP is necessarily an achievable goal and nor should it be. Given that they need or they should need to display a fairly analytical mind and an ability to get to the bottom of things, the academic undertakings mean having an in-depth understanding of various management theories and being able to apply them.

Why might an officer cancel enrolment in MDP?

I would base my answer on the observation that most police are used to success. In their professional lives they are used to being able to prevail in most situations because that is a community expectation and the police should be able to, you know like incident management. Police are not used to failure. They are not used to being told, you haven't made the grade. So, when the time does come that people are being told you have failed in this area their pride is hurt and they withdraw rather than battle on. There is a tendency to rate people more highly than they actually do perform, and that can be the case even when they are low performers. Again, it's a cultural type of a thing. Some officers don't do enough work. Some people have to pull out because of personal and professional commitments.

What about lack of support from superiors and colleagues in the workplace?

I get the perennial comment from people about not being able to do MDP in work time. Personally I reject that as a nonsense. I don't know that there is a place for MDP study in work time. People should be able to use departmental resources, such as the library or electronically. I think that people, who are in that managerial role, should really place themselves in the position where as a strategy to motivate people, they have this compulsory training requirement. So, yes that lack of managerial commitment and I think I wouldn't be surprised to hear of some significant criticism coming from those higher levels if people started doing MDP in work time. So, I think yes.

What factors must be addressed with regard to providing support for students in the MDP?

As a facilitator, listening to people's verbal comments whether its strictly as a facilitator or from one worker in QPS to another, there seems to be a fairly strong lack of comprehension about the importance of research and structuring responses to any given problem There doesn't seem to be a linkage between the academic issues that are thrown up to real world issues. Even though, wherever possible, we are trying to develop assessments that are real world issues. That's not often viewed that way. Some things come back to the marketing issue. In terms of real student support, we do failure management. I think we are hampered by the distance education factor. We need to promote the long-term benefits for MDP for the organization.

So it comes back to whether the officers have the ability and are really motivated to do MDP for the sake of improving themselves.

Yes. I have got a couple of ideas that I'd like to be looking at raising about failure management, and one of them specifically is about making it an obligation for the student to ensure that there is further contact with the facilitator, which sounds very prescriptive, very directive, but to make sure that that happens. To make sure that these people, if they are having problems and are serious about improving themselves that every time I'd speak to them I'd say, you need to think about if your quality level is here, what you need to do is maybe develop a four-point plan for example. Then something else that I have seen is virtually all towards the, there seems to be a problem with really getting a handle on academic writing, standards of writing. A part of that could come down to language standards. I don't know where the answer is. We need to look after the high achievers as well as the low achievers as we are ignoring the potential of the high achievers. The people, who really have sharp minds, really do have the application and the fairness to extend themselves. I think it would ignore the whole purpose of MDP if there are people who are out there who are capable of achieving exceptional levels, and there are some minds out there that are much sharper than mine. We talk about using research, using literature to support arguments. I think it is very important that we do have a body of current and up-todate knowledge. I think that that's probably an essential feature of learning within organizations, like taking the general level of knowledge in the QPS to a higher level generally. We have huge numbers of officers enrolled and this causes problems with giving proper student support.

TRANSCRIPT OF INTERVIEW WITH INTERVIEWEE 6 - PHASE 1

What factors encourage students to participate in MDP?

I think there are a number of factors - one, support from upper management. I think if upper management is seen to condone a program like the MDP then that is one of the first and most important steps towards participation at lower levels. I think the key factor which promotes participation in MDP is promotion, and that is a reality. The program is industrially linked and particularly at the lower levels, how many students would we have if the program was not industrially linked, and I think the reality is very few. I think factors impacting on participation in MDP can differ according to level. I think there is very much a need for professional development, particularly to help them through the Assessment Development Centre process. At the lower level, promotion is the key issue. I think university accreditation is an issue, and once again, it depends on levels. At the senior sergeant level it is very much a plus. I think the enthusiasm and credibility of staff has an impact on participation. Students who are not exposed to MDP staff do not have an opportunity to hear what MDP can offer them. They can actually sit through the benefits of MDP and they will have a more positive attitude and will be more likely to enrol. I think one of the biggest problems impacting on MDP is the negative aspect of the police culture. Enthusiasm and credibility of staff, positive feedback from other students and the communicated benefits of MDP will all serve to enhance participation.

What factors discourage students from participating in MDP?

I think the police culture. It is interesting that students see value in knowledge of law and legislation, but many students don't see value in management. This may be because they see law as an important discipline for police and they don't recognise management as a discipline. I think that this police culture is fuelled by the union which espouses negative values which do not encourage police to undertake MDP. It is a self-perpetuating circle and we have the horror stories about MDP that are perpetuated, although they may not be true. Realistically family and work circumstances can serve, and these are often the reasons that are cited for nonparticipation or withdrawal from MDP, and it is difficult to know how much home and work circumstances actually contribute as compared with lack of academic skills. There is a certain degree of fear of tertiary study and this leads to a lack of confidence in their own ability. There is also another issue which is lack of support from OPS and the MDP to assist them through this lack of confidence and fear. At the same time I think a lack of ambition/laziness can be attributed to lack of participation in the MDP. The reality is not everyone wants to a manager. There is also a lack of ambition on the part of some students. I think the lack of confidence also comes into the lack of understanding of the academic process. They don't really know what they are getting themselves into and it is the fear of the unknown. In addition to the MDP folklore, there is also academic folklore.

What issues might affect an officer's performance in the MDP?

I think there are many issues that can affect performance. The amount of time one can commit to the program which would be moderated by work and family circumstances. These are often cited reasons on withdrawal reports. What they bring with them in terms of their entry-level qualification and knowledge and skills - their writing, research and analytical skills which quite often are developed in other educational programs. Quite often it can come down to their own intrinsic motivation levels, and this is linked to their own protestant work ethic or commitment to excellence. Some students choose not to work to their optimal level at MDP. Their exposure to corporate elements within QPS – management and policy at the corporate levels are at an advantage compared to those who have only been exposed to general duties policing. This is probably because the culture of the police service comes into play here and the general duties police are more exposed to the police culture. It may also be the case that those officers who are exposed to policy may have more exposure to such factors as the development of logical argument and analysis etc. Another thing is the level of support that is unsolicited as well as solicited support. Some students who solicit a high level of support and send in drafts etc. can potentially perform at a higher level. On the other hand, students who actually read and make use of the unsolicited support in the form of updates etc. will also perform better. Many students will not make use of unsolicited or solicited support. Another thing is access to further materials. Students who understand how to access other materials would also be at a distinct advantage. Also, their belief in the value of MDP. Students who feel they can gain something from MDP are more likely to get something from MDP.

Why might an officer terminate his/her enrolment within the MDP?

I think the reasons why they might terminate might be different from why they don't enrol in the first place. Once again family circumstances, work circumstances – they are the reasons often cited for terminating enrolment. There are a number of reasons that could contribute to that – lack of facilitator support, lack of belief in their own ability. I think the catalyst for all this is failure. Failure leads to disillusionment and the lack of success may be attributed to insufficient support networks to meet student needs. There will always be some students who just don't get it, or don't put in the work which is going to take them through that cycle. I think nearly all students who undertake MDP have the potential to complete it, but I think the commitment and effort required by students will differ.

What factors must be addressed with regard to providing support for students enrolled in the program?

I think we need to have systems in place to ensure that certain support standards are met. We need to have the systems in place to make sure that our students are receiving a minimum standard, which hopefully will be a high standard. I think we need to be adequately staffed so that there is always someone there to answer student

queries which I think is a big issue with MDP and it is difficult to provide an adequate service. Coupled with that we need suitably qualified staff so that we give the same high-level service. I think for us to provide support that needs to be a focus. We need to be an organization that holds a high value on the support we provide. I think potentially we should explore having a dedicated student support officer to deal with at-risk students. I think we need to be very innovative and creative in our support mechanisms. There are a number of things we do at the moment – regional visits, telephone help, updates, use of DETOs etc. and there are other things we could explore. We need to be constantly evaluating the support mechanisms we have in place and we need to be looking for new support tools. We need to be vigilant to what other programs, both inside and outside the public sector are doing. I think we need to focus on the quality of our marking. We need consistency and quality in our marking, and in many instances the marking is the only feedback the students will receive and therefore if we provide a high level of support in terms of our marking, I think that is eighty percent of the process for some students covered.

APPENDIX C

QUESTIONNAIRE (PILOT STUDY)

The purpose of this questionnaire is to find out the opinions of police officers who have undertaken at least one unit of MDP. This questionnaire considers continuing education and professional development within the QPS and issues related to participation and performance of officers.

Please complete the following demographic details before proceeding to the questionnaire by placing a tick ($\sqrt{}$) in the appropriate box:

1.	Gender
	Female Male
2.	Age
	21-30 31-40 41-50 51-60
3.	Dependent children
	Yes No
4.	Current Rank
	Senior Constable Sergeant Senior Sergeant Commissioned Officer

5.	J	type of Duty. Which of the following best describes your current duty?
		Uniform general duty Plain Clothes
		Administration/Managerial Specialist
6.	H	Highest educational level attained:
		Completed secondary school
		TAFE Diploma
		Partially completed Bachelor degree
		Completed Bachelor degree
		Postgraduate – partial or completed
7.	(Geographic Location
		Office of the Commissioner
		Media and Public Relations Branch
		Ethical Standards Command
		Crime Misconduct Commission
		Commissioner's Legal Advisors
		State Crime Operations Command
		Operations Support Command
		Administration Division
		Finance Division
		Human Resources Division
		Information Management Division
		Far Northern Region
		Central Region
		Metropolitan North Region
		Metropolitan South Region
		Northern Region
		North Coast Region
		Southern Region
		South Eastern Region

For each of the statements below, please circle the number that most closely represents your feelings using the following scale. Please respond to each item.

1 Strongly Disagree 2 Disagree 3 Undecided 4 Agree 5 Strongly Agree

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	Undertaking MDP assists my professional development as a manager.	1	2	3	4	5
2	I would not do MDP if it were not compulsory for promotion.	1	2	3	4	5
3	Senior officers appreciate the benefits of management education for managers.	1	2	3	4	5
4	Before I enrolled in MDP I would have benefited from assistance with how to interpret an assignment topic.	1	2	3	4	5
5	Facilitators I have spoken with have a positive attitude to providing assistance.	1	2	3	4	5
6	MDP staff understand the work of police officers.	1	2	3	4	5
7	MDP is acknowledged by officers as a sound educational program.	1	2	3	4	5
8	The content of MDP is valuable for managers within the QPS.	1	2	3	4	5
9	Completing MDP will not assist my career development.	1	2	3	4	5
10	QPS as an organization has helped me to understand the importance of an officer having management knowledge and skills.	1	2	3	4	5
11	Management education for officers is important if QPS is to achieve the goals of the Strategic Plan.	1	2	3	4	5
12	I was not prepared through previous QPS in-service education to complete MDP.	1	2	3	4	5
13	Emails and updates from facilitators assist me.	1	2	3	4	5
14	MDP staff do not grant extensions if needed to complete assignments.	1	2	3	4	5
15	Standards required at MDP are too high.	1	2	3	4	5
16	By doing MDP I now feel confident to undertake other tertiary-level study.	1	2	3	4	5
17	QPS has helped me to understand the need for continuous professional development.	1	2	3	4	5
18	I understand how much effort is required to plan an assignment.	1	2	3	4	5
19	When I enrolled, I did not think MDP would be so difficult.	1	2	3	4	5
20	The feedback I received on assignments assisted my learning in management.	1	2	3	4	5
21	I know how to seek assistance from MDP staff.	1	2	3	4	5
22	I would not benefit from visits by facilitators to my workplace.	1	2	3	4	5
23	MDP material is relevant for a police officer who is preparing to be, or is a manager.	1	2	3	4	5

24	Management education for officers is important if QPS is to improve as an organization.	1	2	3	4	5
25	I would not put in more effort with study if I had more time.	1	2	3	4	5
26	I had the skills necessary to undertake MDP when I first enrolled.	1	2	3	4	5
27	Senior members of QPS support my study of MDP.	1	2	3	4	5
28	MDP material was forwarded before the commencement of the semester.	1	2	3	4	5
29	I would participate in telephone tutorials if they were offered.	1	2	3	4	5
30	I do not believe that by completing management education I can be a better manager.	1	2	3	4	5
31	Because many officers in QPS focus on current operational needs, they do not see the importance of sound managerial skills.	1	2	3	4	5
32	Sound time management skills are important for success in study.	1	2	3	4	5
33	I would attend Assignment-Writing Workshops in the workplace if they were offered.	1	2	3	4	5
34	Officers should not be allowed time on duty to study MDP.	1	2	3	4	5
35	MDP materials were well organized.	1	2	3	4	5
36	Residential schools at the Queensland Police Academy for each unit would be a good idea.	1	2	3	4	5
37	Officers who undertake MDP demonstrate they can accept change.	1	2	3	4	5
38	Education and training of officers is essential if QPS is to improve its service level.	1	2	3	4	5
39	Some officer roles (for example Covert Operations) may hinder sound performance in MDP.	1	2	3	4	5
40	I would attend an orientation program for MDP in my workplace if it were offered.	1	2	3	4	5
41	I contact MDP staff to ask for help if I need it.	1	2	3	4	5
42	Distance education for me is not a good way to study.	1	2	3	4	5
43	MDP assessment items are not relevant to police officers.	1	2	3	4	5
44	Some officers enrol in MDP just to be eligible for relieving duties and higher pay.	1	2	3	4	5
45	Continuous professional development of officers is important for QPS to be a professional organization.	1	2	3	4	5
46	Before I enrolled in MDP I would have benefited from assistance with study skills for distance education.	1	2	3	4	5
47	Facilitators have not contributed to my success with MDP.	1	2	3	4	5
48	Support of my family is important for me to successfully undertake MDP.	1	2	3	4	5
49	Distance education mode of learning suits me because it is flexible.	1	2	3	4	5
50	I should be able to access additional material on management if I require it.	1	2	3	4	5

Thank you for taking part in this study.

APPENDIX D

QUESTIONNAIRE (MAIN STUDY)

The purpose of this questionnaire is to find out the opinions of police officers who have undertaken at least one unit of MDP. This questionnaire considers continuing education and professional development within the QPS and issues related to participation and performance of officers.

Please complete the following demographic details before proceeding to the questionnaire by placing a tick ($\sqrt{}$) in the appropriate box:

1.	Gender	
2.	Age	
	31-40 41-50	
3.	Dependent children	
4.	Current Rank	
	Sergeant	

5.		Type of Duty. Which of the following best describes your current duty?
		Uniform general duty
		Plain Clothes
		Administration/Managerial
		Specialist
6.	I	Highest educational level attained:
		Completed secondary school
		TAFE Diploma
		Partially completed Bachelor degree
		Completed Bachelor degree
		Postgraduate – partial or completed
7.	(Geographic Location
		Headquarters/Metropolitan North and Metropolitan South
		North Coast/South-Eastern
		Central Region
		Northern/Far Northern

For each of the statements below, please circle the number that most closely represents your feelings using the following scale. Please respond to each item.

1 Strongly Disagree 2 Disagree 3 Undecided 4 Agree 5 Strongly Agree

		Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
		Str Dis	Dis	Un	Ag	Str
1	Professional development is important for police officers.	1	2	3	4	5
2	Completing MDP will assist my career development.	1	2	3	4	5
3	QPS as an organization has helped me to understand the importance of an officer having management knowledge and skills.	1	2	3	4	5
4	I did not have trouble understanding the content of MDP material provided.	1	2	3	4	5
5	I would benefit from visits by MDP staff to my workplace.	1	2	3	4	5
6	I would benefit from tutorials conducted at my workplace by MDP staff.	1	2	3	4	5
7	MDP assessment items tested my understanding of the material provided.	1	2	3	4	5
8	Officers can discuss with MDP staff how they can improve their learning of management.	1	2	3	4	5
9	Senior officers appreciate the benefits of management education for managers.	1	2	3	4	5
10	Police officers should not have to undertake professional development.	1	2	3	4	5
11	Management education for officers is important if QPS is to improve as an organization.	1	2	3	4	5
12	MDP staff members have contributed to my success with MDP.	1	2	3	4	5
13	I would attend an orientation program for MDP in my workplace.	1	2	3	4	5
14	MDP learning guides were easy to follow.	1	2	3	4	5
15	Within MDP, officers are treated fairly.	1	2	3	4	5
16	Police officers should take responsibility for their own professional development.	1	2	3	4	5
17	I value being provided with free professional development via MDP.	1	2	3	4	5
18	Senior members of the QPS support my study of MDP.	1	2	3	4	5
19	MDP staff members have a positive attitude to providing assistance.	1	2	3	4	5
20	I would attend an assignment-writing workshop for MDP in my workplace.	1	2	3	4	5
21	Readings provided by MDP assisted my learning.	1	2	3	4	5
22	Within MDP, officers' efforts are valued.	1	2	3	4	5
23	Study of management is important for a police officer who is preparing to be or is, a manager.	1	2	3	4	5
24	I know how to seek assistance from MDP staff.	1	2	3	4	5
25	Emails and updates from MDP staff assisted my learning.	1	2	3	4	5

26	Officers are encouraged to discuss with MDP staff how they learn about management.	1	2	3	4	5
27	Within MDP, officers' ideas are respected.	1	2	3	4	5
28	I would undertake professional development independently of	1	2	3	4	5
	the QPS if it were required for me to gain promotion.					
29	I believe that by completing MDP I can be a better manager.	1	2	3	4	5
30	Effective time management is essential for success in MDP.	1	2	3	4	5
31	The feedback I received on assignments assisted my learning	1	2	3	4	5
	about management.					
32	Officers are able to discuss with MDP staff how they think	1	2	3	4	5
	when they learn about management.					
33	Within MDP, officers' individual differences are respected.	1	2	3	4	5
34	Officers who undertake MDP demonstrate they can accept	1	2	3	4	5
	change.					
35	I enjoy learning in the distance education mode.	1	2	3	4	5
36	Officers can discuss with MDP staff different ways of learning	1	2	3	4	5
	about management.					
37	Within MDP, officers' suggestions are appreciated.	1	2	3	4	5
38	Undertaking MDP will assist my professional development as	1	2	3	4	5
	a manager.					
39	QPS has helped me to understand the need for continuous	1	2	3	4	5
	professional development such as MDP.					
40	I organize my time to allow for study of MDP.	1	2	3	4	5
41	I would participate in telephone tutorials if they were offered.	1	2	3	4	5
42	Officers can discuss with MDP staff how well they are	1	2	3	4	5
	learning about management.					
43	I know how much study is required for success in MDP.	1	2	3	4	5
44	MDP assessment items were linked to the content of the	1	2	3	4	5
	material.					
45	I know how to plan an assignment for MDP.	1	2	3	4	5
46	Distance education for me is a convenient way to study.	1	2	3	4	5
47	MDP materials were easy to follow.		2	3	4	5

Thank you for taking part in this study.

APPENDIX E

INTERVIEW SCHEDULE - PHASE 3

Questions in relation to the In-service Professional Development Scale

Question 1: A significant number of officers agree that professional development is important, but equally significant numbers of officers stated that they only undertook study of MDP because it was compulsory for promotion. What impact do you see this having on the performance of officers who undertake the program?

Question 2: Very few officers believe that senior officers appreciate the benefits of management education or that senior members of the QPS support their study of MDP. Why do you believe officers have such perceptions.

Question 3: Just under half of those who responded believe that undertaking MDP would assist their professional development as a manager and only a similar number believe that MDP would assist their career development. What impact does this have for the delivery of the program?

Question in Relation to the Policing as a Profession Scale

Question 1: Significantly high numbers of respondents believe that management education for officers is important if the QPS is to improve as an organization and that education of officers is essential if the service is to improve its level of community service. Few respondents, however, believe the QPS has helped them to understand the need for continuous education and professional development such as MDP, and few believe the QPS as an organization has helped them to understand the importance of an officer having management knowledge and skills. What is the significance of this, in your opinion, for the management of the program?

Question in relation to the MDP Success Potential Scale

High numbers of respondents believed that before they enrolled in MDP they would have benefited from assistance with how to interpret an assignment topic. Why do you believe officers responded in this way and how can such officers be assisted?

Questions in relation to the Student Support Scale

Question 1: Approximately half of the respondents said they would attend an orientation program for MDP in their workplace and less than half said they would participate in teletutorials if they were offered. Why do you believe such lack of interest exists?

Question 2: About 60% of respondents said they would benefit from tutorials conducted at their workplaces and a similar number said they would attend an assignment-writing workshop in their workplace. Are these levels of responses significant for the delivery of the program in your opinion?

Question 3: About 59% of respondents believe that MDP staff members have a positive attitude to providing assistance to officers and only 35% believe MDP staff members have contributed to their success with MDP. Can you see implications for the delivery of the program from these data?

Question 4: Only 31% of respondents believed that feedback received on assignments assisted their learning about management. Can you suggest a reason for this?

Questions in relation to the Clinical Program Delivery Scale

Question 1: Approximately half of the respondents stated they found the learning guides easy to follow and that MDP materials were easy to follow. What impact could such data have on the performance of officers who undertake the program?

Question 2: Just over half the respondents believe distance education is a convenient way for them to study. If officers do not like to study in this mode, could this be significant for the service with regard to participation and performance of officers?

Question in relation to the Officer-Staff Member Discourse Scale

Question 1: Approximately one-third of respondents believed they were encouraged to discuss with MDP staff how they learnt about management; how they thought when they learnt about management; could discuss different ways of learning about management; and could discuss how well they were learning about management. What implications do you believe this has for the role of MDP staff?

Questions in relation to the Emotional Support Scale

Question 1: A total of 34% of respondents believe that within MDP officers are treated fairly; 24% believe that officers' efforts are valued; 20% believe that their ideas are respected; 18% believe that their individual differences are respected and 18% believe officers' suggestions are appreciated. How could these levels of emotional support be raised in your opinion?

Question 2: Approximately half of all respondents recorded undecided for these five questions. Can you suggest a reason for this?

APPENDIX F

TWO SEMI-STRUCTURED INTERVIEW TRANSCRIPTS FOR PHASE 3

PHASE 3 – TRANSCRIPT 1

Thank you for your help. What I am seeking here is the perspective of the head of school. What I am seeking from this phase of study relates to the support that can be offered to officers in relation to several participation and performance issues. The first set of questions relate to in-service professional development generally.

Significant numbers of officers agree that professional development is important, but equally significant numbers of officers stated they only undertook study of MDP because it was compulsory for promotion. What impact do you see this having on the performance of officers who undertake the program?

I think, perhaps, from what I have seen over a number of years is that those who do see MDP as important apply themselves really well, so on the contrary, those who are undertaking MDP because it was compulsory for promotion, they tend, I believe to put in a minimal effort that they are really not committed to learning as much as they really can from the program. They do sufficient to get through and so do not have any real learning outcomes from that – simply to get themselves qualified so they can apply for promotion. So, I see that it impacts pretty significantly on their performance because we do have officers who perform really well and I would say they would be the ones who are undertaking MDP for a range of reasons, not just promotion.

Thank you. Very few officers believe that senior officers appreciate the benefits of management education or that senior members of the QPS support their study of MDP. Why do you believe officers have such perceptions?

Well, from my experience in the QPS which is a number of years, I would say that such perceptions are based on the officers' observations that there are senior officers whose management practices, and they demonstrate these management practices on a regular basis are quite contrary to the management practices that are being promoted through MDP. MDP is concerned is about contemporary management theory, talking about participative management - all of those sorts of issues, whereas the traditional management style within QPS is very much command and control based on the strict hierarchical structure and unfortunately many senior officers are still practicing management that could be much more easily categorized as command and control when they are actually managing people. I am not saying command and control management practices haven't got a place within QPS. There are situations where command and control has a place and that has to be recognized but we are talking about situations where we have

senior officers managing people in day-to-day operations, not in command or incident type situations. So I believe that their perceptions are based on what they see being practiced and a lot of that practice is very contrary to the current theory that those officers are studying.

Just under half of those who responded believe that undertaking MDP would assist their professional development as a manager and only a similar number believe that MDP would assist their career development. What impact does this have for the management of the program?

I think it has a big impact because it seems to me that officers are not appreciating the importance of management in their own career progression. The officers who are undertaking MDP are certainly operational police, but they are police who are leading into management positions. Certainly initially they are much more advisory positions but the time they have completed the last level of MDP they are moving into the commissioned officer ranks, and they have significant senior management roles within the organization. Now if they are saving that MDP, or only half of them are saying that MDP will assist their career development, I think they are having a problem understanding what is required in their career, and therefore people managing the program perhaps we need to be looking at the content of the program and ensuring that they are covering management theory that is relevant to the positions these officers are going to apply for. I guess for managers of the program, it seems outside our program, but it seems to be they don't understand their own career development, so perhaps if MDP were able to run workshops there should be some section included on career development for the sorts of skills they really need if they are going to progress within the service.

Looking at policing as a profession now. Significantly high numbers of respondents believe that management education for officers is important if QPS is to improve as an organization and that education of officers is essential if QPS is to improve its service level. Few respondents, however, believe QPS has helped them to understand the need for continuous professional development such as MDP and few believe QPS as an organization has helped them to understand the importance of an officer having management knowledge and skills. What is the significance of this, in your opinion, for the management of the program?

Okay, well the management of the program – looking at the last part of that, they are saying that the organization hasn't helped them to understand the importance of them having management knowledge and skills, for the management of this program, I guess the most important thing managers can do is to ensure that the content that we are providing them is sound theoretically based, there needs to be sound application of that theory in relation to positions they are going to be applying for. Management needs to ensure any curriculum development that is done is based on sound research and that is research that is done with officers to ensure that the theory actually relates to what those officers do. The linkages must be made so that the officers are not just given the theory. They have to be shown

the linkages. Curriculum writers must understand this. As well, like in the time I have been here at MDP initially there was some marketing, but there needs to be promotion of the program, but that promotion needs to be coming from the senior officers of the service. MDP management needs to target senior officers to ensure they understand the benefits of MDP and those officers can promote MDP in the workplace. That is particularly important in an organization like the QPS which is rank-structured where a lot of importance is placed on the opinion of senior officers of a higher rank.

Looking at MDP Success Potential, just under half the respondents said they had trouble understanding the content of MDP material provided. Why do you believe this number is so high?

Well, I believe that would be so high because a lot of the people undertaking the program don't have a background in tertiary study. For quite a lot of these officers it is a pretty difficult thing for them to be doing MDP simply because many of them do not have an undergraduate degree. MDP materials are pitched at postgraduate level and we have recognition from a number of universities for officers to get direct entry into postgraduate courses, so of course, it is going to be difficult for those who do not have a background in tertiary education and certainly do not have an undergraduate qualification to be attempting to study at a postgraduate level, despite the fact that they need additional support, it is still a pretty big leap and many of them do not have the basis.

High numbers of respondents believed that before they enrolled in MDP they would have benefited from assistance with how to interpret an assignment topic. Why do you believe officers responded in this way?

Oh, I think building on what I have just said. Those officers have not had experience in writing assignments. They have come from training situations but that is from the training perspective – short answers or multiple choice. Much of the training has a practical basis where they are observed practicing skills, and the ones who do not have a tertiary background, they have a limited background in knowing what an assignment is let alone being able to interpret a topic and knowing what the key issues were. I think it is because they don't have the foundation to support what they are being asked to do.

Looking at student support now. Approximately half of the respondents said they would participate in teletutorials if they were offered. Why do you believe such lack of interest exists?

Okay, I think it probably relates to what was revealed earlier on – a lot of them are undertaking the course simply because they have to do it if they want a promotion and they don't really have a genuine interest in undertaking the study. These people have got no choice if they want promotion, so it is not as if they have enrolled in a course where they choose the subjects. If they don't see the study as

being relevant and helping them to do they job better, or if they don't have a personal interest in it, and they are doing the study so they are eligible for promotion, I don't think they will be prepared to do too much extra. This is reflective of their attitude.

60% of respondents said they would benefit from tutorials conducted at their workplaces and a similar number said they would attend an assignment-writing workshop in their workplace. Are these responses significant for the delivery of the program in your opinion?

I think they are and what they are saying to us is that a reasonable percentage of the population out there have a commitment to their study and that means as a head of school, part of the management we need to work out how we can meet this need in the student population.

59% of respondents believe that MDP staff members have a positive attitude to providing assistance to officers and only 35% believe MDP staff members have contributed to their success with MDP. Can you see implications for the delivery of the program from these data?

Yes, I think that from that it is indicating that MDP staff have to be more proactive in their teaching role. I think it is easy in the distance education setting to feel it is the student's responsibility, but I think we need to meet with facilitators to determine how they can be more proactive and how they can demonstrate to students how they can support them. Our program is different from a normal university, but we do have facilities to be providing more support than is the case. For me I would see one of the things that need to be done is that there needs to be contact by facilitators early in the semester and that it is proactive. Facilitators should discuss with the students how they can best support them – perhaps through phone calls and there are problems with budget, but we could have phone calls as well as email. Additional funds for professional development for facilitators would help. Many facilitators do not have an educational background because they are police, so professional development is essential. Police officers new to the program need to be mentored as well to help them.

Only 31% of respondents believe that feedback received on assignments assisted their learning about management. Can you suggest reasons for this?

Yes, there are lots of reasons for this. One of the problems we have experienced is that we have a number of facilitators who do not have a solid foundation in management. There are police officers who are facilitators who do not even have an undergraduate degree in management, let along postgraduate qualification in management. I believe that that leads to problems because those people lacking the qualification are also lacking the knowledge and understanding and lack professional confidence in being able to clearly articulate issues that relate to management and the application of the management theory. This leads to their

becoming more focussed on other issues such as the process of writing the assignment and the construction of the assignment, and if they are focusing on providing feedback on that sort of thing and not management issues, that can lead to problems. I think another of the problems that I have seen is that because of the lack of academic base of facilitators in management and lack of management experience, it leads facilitators to having a very narrow interpretation of the questions themselves, and because they are lacking in professional confidence they do not feel confident to discern whether officers are addressing management issues from an appropriate perspective. People need to be able to clearly discern and understand whether the students are showing genuine understanding of management principles or not.

Looking at clinical program delivery, approximately half of the respondents stated they found the learning guides easy to follow and that MDP materials were easy to follow. What impact could such data have on the performance of officers who undertake the program?

Well if officers find the materials easy to follow and to understand, they are going to be more likely to read the materials and to take on board the information. I would expect that if they find it easy to follow, I would expect their performance to be higher than if they found the material easy to understand.

Just over half the respondents believe distance education is a convenient way for them to study. If officers do not like to study in this mode, could this be significant for the service with regard to participation and performance of officers?

I think it could be extremely significant. For those officers who do find it convenient and enjoy study, we will see them continue and complete the semester. Many withdraw, but it is probably not much higher than other distance education programs. For those who do not find it a convenient way to study they the ones more likely to withdraw. There are a lot of factors that impact on people studying in the distance education mode and if they are familiar with that style of delivery and if they have not studied for some time, their whole perception of the facilitator's role will be quite different from what we promote. We want to support them with their studies. Many officers will not perceive facilitators to be providing that role.

Looking at officer-staff member discourse, approximately one-third of respondents believed they were encouraged to discuss with MDP staff how they learnt about management; could discuss different ways of learning about management; and could discuss how well they were learning about management. What implications do you believe this has for the role of MDP staff?

Well, you would like to think that a lot more of the respondents could discuss those sorts of issues, so I guess the implications for MDP staff – we need to ensure that

we have facilitators who have the management and educational background so facilitators are confident to discuss those sorts of issues with the students.

Do you think the culture of the service could impact there, particularly where we have officers at different ranks who are facilitators?

Yes of course, officers will always be very careful what they say to another officer, and because of the cultural issues, many officers will not discuss those sorts of issues with facilitators who are police officers. I think for staffing of MDP we need to have the mix of staff members and police officers – my experience is that police will speak to staff members about different things from those they will speak to police officers about. So there are perhaps more opportunities for police to discuss those sorts of issues with staff members. But perhaps as well implications for the role of MDP staff, we need to ensure that facilitators here understand that discussing these sorts of issues here is part of their job. A lot of them don't have a wide educational experience to draw on, and they would not have thought that doing this sort of thing was part of their job. They would view their job as delivering materials, and answering questions they are asked and that assignments were marked and returned in a timely way, rather than thinking about or analysing some of the underlying educational issues involved in facilitation and teaching a unit of work.

I think it comes back to what you said before about facilitators having qualification in management and qualification and experience in education.

The longer I am here the more critical I see this issue.

Approximately one-half of respondents believed they could discuss with MDP staff how they could improve their learning about management. Does this have implications for the role of MDP staff?

Well again it gets back to some of those things I have been saying. Unless people come from an educational background they will not see it as important to discuss how we learn about things, and they will not understand the theory and that is to be expected as they have not studied in that area, and the implications are that there does need to be professional development and they need to be encouraged to discuss learning issues so that they can build up the confidence to discuss those sort of issues with students.

Looking at emotional support now, a total of 34% of respondents believe that within MDP officers are treated fairly; 24% believe that officers' efforts are valued; 20% believe that their ideas are respected; 18% believe that their individual differences are respected and 18% believe officers' suggestions are appreciated. How could these levels of emotional support be raised in your opinion?

Okay, well the way this is going to be raised is through the facilitators. From these sorts of responses it appears to me that there needs to be some professional development for facilitators, so we need to organize some sessions so that officers are taught some educational theory and the importance of these needs being met along with a whole range of other issues. So this is a good indicator that there are some needs that need to be met through professional development.

Approximately half of all respondents recorded undecided for these five questions? Can you suggest a reason for this?

Probably very much a cultural thing. A lot of officers – the whole culture of the QPS does not encourage these sorts of issues to be discussed in a great lot of depth. So culture is one aspect. As well we are dealing with a lot of officers who are very experienced in their job and very competent in their job but certainly the whole area of education and study is new to them and they probably don't like to admit to any sorts of what they could interpret as weaknesses on their part and would prefer not to answer. I do think the whole cultural thing would have a big impact on what they are prepared to say.

Thank you for your perceptions – they are very much valued.

PHASE 3 – INTERVIEWEE 2

Thank you for your help with this interview. As Manager of the MDP what we are looking at are ways that we can use the information gained from the questionnaires to enhance the delivery of the program.

The first issue I looked at was In-service Professional Development, and a significant number of officers agree that professional development is important, but equally significant numbers of officers stated they only undertook study of MDP because it was compulsory for promotion. What impact do you see this having on the performance of officers who undertake the program?

I guess the problem that I see is where people have a belief that a program is compulsory and they undertake it for compliance reasons and not because they want to or need to as an optional extra. From my experience when people have an understanding of the bigger picture of where a program such as MDP fits in they have a better understanding of why they should do it even on a voluntary basis, and it somehow needs to be linked into panel interviews as part of the merit selection process. Whilst the EB process has a direct link into MDP and provides some benefits, that gets to a certain level, such as Senior Sergeants and it stops and everyone knows there are no further requirements.

Very few officers believe that senior officers appreciate the benefits of management education or that senior members of the QPS support their study of MDP. Why do you believe officers have such perceptions?

I guess having been in the Police Service for thirty years, it is not a new perception and in all that time anyone who has tried to improve their career by undertaking education has been viewed as not a very good operational police officer and with more leanings toward academia and therefore they are not suited. I guess there has been a gradual change over the years and those people who have completed management studies do not openly talk about their completion rates or their study for fear of victimization, harassment or not fitting in with the culture of being a good police officer. Then again there are some who rely heavily on the knowledge gained by some senior officers, and I know of one Assistant Commissioner who said he always surrounds himself with officers smarter than himself because he knew he had some shortcomings and he was too old to undertake study. So, why don't they appreciate MDP, perhaps they do not understand what it is that MDP delivers without understanding that there are other programs that deliver what they believe should be delivered.

Just under half of those who responded believe that undertaking MDP would assist their professional development as a manager and only a similar number believe that MDP would assist their career development. What impact does this have for the management of the program?

Again it comes back to question one where people are completing it for a compliance reason and that the service does not generally reward people for being good managers, and if there was a reward system which supported those people who successfully completed MDP by giving them some formal recognition, there may be more recognition of the importance of MDP and officers may actually benefit through career placement and individuals need to think about where they want to be in the organization and how they want to get there, and they need a good career plan. For some they perceive the goal posts keep changing, but they need to position themselves so that their knowledge, skills and abilities can be used for the benefit of the organization.

The next area looks at policing as a profession. Significantly high numbers of respondents believe that management education for officers is important if QPS is to improve as an organization and that education of officers is essential if QPS is to improve its service level. Few respondents, however, believe QPS has helped them to understand the need for continuous professional development such as MDP and few believe QPS as an organization has helped them to understand the importance of an officer having management knowledge and skills. What is the significance of this, in your opinion, for the management of the program?

I guess while there are budgetary constraints, the tendency is to cut back on education and training. The number one risk management control is training, not

only for corruption prevention but also to make sure there is improved client service delivery and in considering the Commissioner has his 4 Ps and that we have a philosophy of client service delivery it is important that managers and supervisors at all levels have a good grounding in management theory. The service must acknowledge that those skills an officer has as an operational police officer are not necessarily the skills they need as a senior manager in the organization and that MDP is one program that provides a very good basis for the future development of managers. I guess it needs to be the ethos of continual learning and it just does not stop when a person reaches a particular level. Life-long learning has to be part of the organizational culture. There are some who understand the importance of management, but it is not generally well supported either up or down.

With regard to MDP Success Potential, just under half the respondents said they had trouble understanding the content of MDP material provided. Why do you believe this number is so high?

I guess there are a fair percentage of those who have no previous experience in reading academic-type material, and while they may be good operational police, it is not a field where they have familiarity or previous exposure. So, for example police officers who may have 25 years experience and now have to do MDP may feel they cannot cope with the academic rigor, and it is a new field for them. There are issues of fear and pride that go with it and some people don't like to acknowledge that they have a problem and they don't like to ring people in the workplace because it is an acknowledgement that they may be weaker than their colleagues and be held up to ridicule. It is a big issue for people.

High numbers of respondents believed that before they enrolled in MDP they would have benefited from assistance with how to interpret an assignment topic. Whey do you believe officers responded in this way?

Again it is an issue of fear and pride and people who haven't had the experience of being able to interpret or critically analyse to the standard required in academic study, while not really understanding that they do have the knowledge and skills because many of them can analyse quite complex criminal and operational matters but they don't apply that same thought process into analysing the topic, and I know from past experience that some people that I have assisted believe that MDP is out to catch them – that there are hidden questions and what has been written as a question is not what is being sought by way of an answer. There is a perception that it is out to trick people. They also believe that it is linked to financial aspects so some people can be kept down from promotion.

Looking at the program and the student support that is offered, approximately half of the respondents said they would attend an orientation program for MDP in their workplace and less than half said they would participate in teletutorials if they were offered. Why do you believe such lack of interest exists?

I think police officers generally are busy and MDP is only one thing they have to deal with on a daily basis, apart from operational issues and other things such as family and other interests they may have. Trying to get the time means they would have to attend an orientation in their own time and they don't have a lot of spare time because they are often coming in on days off and in leave time to finalise operational requirements. And again to attend as a group they might feel they are going to be ridiculed by colleagues if they are going to ask for more information. The fear of the unknown probably.

60% of respondents said they would benefit from tutorials conducted at their workplaces and a similar number said they would attend an assignment-writing workshop in their workplace. Are these responses significant for the delivery of the program in your opinion?

I think if we are talking about client service delivery and there may only be a small number who are struggling with failure management, but if we want to reduce the negative perceptions about MDP as far as providing good client service delivery we should be conducting assignment-writing workshops and it would appear if people can understand the process, the outcomes may be far better, far easier. The restriction we have is budget, but as a risk management strategy we have to weigh that up because at the end of the day if MDP was to fall over because we were not able to go out and provide assignment-writing workshops then the community and other providers are going to have a field day about the organization's commitment to training and development and the development of people for key management positions.

59% of respondents believe that MDP staff members have a positive attitude to providing assistance to officers and only 35% believe MDP staff members have contributed to their success with MDP. Can you see implications for the delivery of the program from these data?

I guess the query that I have is of the 65% saying that MDP have not contributed, and having just done some work with the staff at MDP there are a range of issues there that have to be resolved, but generally client service delivery is effective when those providing the service are dealing with internal conflicts and that has a tendency in some organizations to run onto the clients, and in this case there are only 35% of staff members contributing to students' success, then we need to turn that around. It is first impressions that count in client service delivery. We need to change client service delivery strategies.

31% of respondents believe that feedback received on assignments assisted their learning about management. Can you suggest reasons for this?

I guess with some of the ones I have spoken to in the past they believe that the comments made on assignments in the past have been more about the construct

and the content of their assignment and not so much about the theories of management and how they have applied that knowledge to their assignment, so that when they have a fairly strong belief that comments made are only about improving the structure and standard to further promote MDP as a field of academia, rather than a constructive comment about how to apply theories and arguments in an assignment.

Looking at clinical program delivery, approximately half of the respondents stated they found the learning guides easy to follow and that MDP materials were easy to follow. What impact could such data have on the performance of officers who undertake the program?

The majority of the population have a learning level about grade three and the exception is about grade seven, so if we are keeping the material relatively simple and not demeaning the knowledge base of people undertaking MDP, where materials provided are easy to read and are simple to follow, but clearly structured and there is some support provided, there is probably greater relief and reduces the fear and people can undertake a program with confidence.

So should we be offering this at master's level?

Generally people don't understand what MDP is providing them and there is a great fear that it is only academic learning and in reality not everyone needs to do higher level study, when we want them to understand some of the theories of management and how they should be applied in the workplace and the reasons why for example in the service at the moment there are issues of stress management and some of this has happened through inadequate application of HR policy but do they really need to do an MBA. We need to keep it simpler. Doing MBAs should not be core business.

Just over half the respondents believe distance education is a convenient way for them to study. If officers do not like to study in this mode, could this be significant for the service with regard to participation and performance of officers?

I guess one of the issues is that whilst the perception is that MDP is compulsory, it is not really compulsory because if they don't want to progress in the organization there is no compulsion to do so. However, distance education has its problems because for some distance is a good way to make contact with people but it seems that nowadays with IT we should consider our time frames and our postage dates. In the metro area people get their materials sooner, and another issue for people at Mt Isa who want to talk, colleagues may not be able to meet on a regular basis. We don't actively promote who is doing study because of issues of privacy. For those who don't like to study if they want to go to a university or do a live-in there are other issues in relation to finance, quality of life of the individuals, absence, travel and that may have more of an impact on people and would also have an

impact on the people, MDP staff, who are trying to provide that service to people – reduces the workload for one lot but increases it significantly for another lot.

This section looks at officer-staff member discourse.

Approximately one-third of respondents believed they were encouraged to discuss with MDP staff how they learnt about management; how they thought when they learnt about management; could discuss different ways of learning about management; and could discuss how well they were learning about management. What implications do you believe this has for the role of MDP staff?

I guess one of the issues is that as numbers increase because of interest and as we promote MDP and people begin to understand the benefits, the client service delivery approach from MDP is going to be increasing because in addition to just providing a phone contact with the workload MDP staff have, so what is the appropriate level of support we give, how complex is the issue they are discussing and try to address all these... While they are learning about it, how are they actually applying it in the workplace? The problem I see is how do we maintain the professional development of MDP staff with the current budgetary restrictions so MDP staff are well versed in the aspects of management that are there so that the information that they are imparting is the latest and the best and that we do need to have a process where individuals have approval to go to a conference, then they do a presentation back to MDP. We have to look at a number of strategies for professional development for MDP staff and sharing information.

Approximately one-half of respondents believed they could discuss with MDP staff how they could improve their learning about management. Does this have implications for the role of MDP staff?

What you have said about the implications for MDP staff have been incorporated in this question really.

There are benefits for MDP staff if they join AIM or a similar external organization.

Emotional Support

34% of respondents believe that within MDP officers are treated fairly; 24% believe that officers' efforts are valued; 20% believe that their ideas are respected; 18% believe that their differences are respected and 18% believe officers' suggestions are appreciated. How could these levels of emotional support be raised in your opinion?

Some of it comes from within about empathy and understanding, and one of the things that is critical for officers is that MDP staff have a very good understanding of what it is like out there as an operational police officer so that they can relate to them on a one-to-one basis. It comes back to running orientations or assignment-writing workshops and the value that comes from them. When comments are

being made about MDP staff when marking an assignment, we are looking at the system and trying to improve the process for them. If people have odd-ball ideas in assignments, it is the role of MDP staff to encourage them to have a different approach and to respect them to have the courage to raise such ideas. In the QPS we are all different and we need to encourage people to be individuals. Reduce the fear that MDP is set up to trap them so they cannot get ahead. It is critical to listen to people and understand what they are saying. Some will be reticent about what they will say.

Approximately half of all respondents recorded undecided for these five questions. Can you suggest a reason for this?

They may have thought they were trying to be trapped and fear that we could trace them back and penalize them, and while surveys are done in confidence, there is a great fear that we can track the person down and we will hold them up for blame and ridicule and we'll actually penalize them for raising what some people might see as negative criticism. I guess in an open, transparent organization the comments should be viewed as constructive comments and not negative criticism. Unfortunately there are some people who take some comments as a personal slight, but if we are providing good client service and we simplify the process for them, and we get them to understand that enrolment in postgraduate studies is a benefit not a requirement, then they may have more of an acceptance of doing MDP. I guess at the same time we need to review some of our content and make it more relevant to what they are doing because society is changing, organizational needs are changing, client needs are changing on a regular basis and we need to have a process in place. Continual improvement is needed. We must acknowledge differences in people and have a 99% appreciation rate. A lot of people believe through surveys that their identity is known and they will not respond, especially where they can be held up for negative criticism.

APPENDIX G

INFORMATION LETTER TO PARTICIPANTS

TITLE OF PROJECT: A study of factors affecting participation and performance of officers undertaking the Queensland Police Service's Management Development Program by distance education.

NAME OF SUPERVISOR: Dr J. Dorman

NAME OF RESEARCHER: Barbara Jack

NAME OF PROGRAM IN WHICH ENROLLED: Ph.D

The purpose of the study is to find the determining factors of participation and performance by officers of the Queensland Police Service undertaking the Management Development Program by distance education. Of central concern to the study are the implications of the study for enhancing delivery of the program. To answer the research questions of this study, a combination of quantitative and qualitative data collection strategies are planned. Stage one involves collecting data through semi-structured interviews with six facilitators of the program. Stage two involves conducting a survey with 700 officers who have completed at least one unit of the Management Development Program and stage three involves semi-structured interviews with the manager of the program and the head of the school of management.

It is not anticipated that there will be any personal risk or inconvenience to any participant.

It is anticipated that stage one and stage three interviews will be of no more than one hour's duration. It is expected that the questionnaire will be completed within one hour.

Potential benefits of this research will be directly aligned with the delivery of the Management Development Program with consequent improvements to the delivery of the program that will assist all officers. Management within the Queensland Police Service should also be enhanced through more effectively delivery of the program. The results of the research may be of value to other police jurisdictions.

All participants who are invited to take part in the research are free to refuse consent altogether without having to justify their decision, and all are free to withdraw consent and discontinue participation in the study at any time without giving a reason.

Participants are assured of confidentiality with regard to the storing of tapes, hardcopy transcripts and survey instruments. Confidentiality is also assured in relation to the information provided and in relation to any publications that may arise from the research. Data will be secured at the Queensland Police Service Academy.

Any questions regarding this project should be directed to the researcher on 07 3246 8273.

All participants are invited to discuss the outcomes of this research project. The Queensland Police Service will be provided with a copy of the completed thesis. The Human Research Ethics Committee has approved this study.

In the event that you have any complaint or concern about the way you have been treated during this study, or if you have any query that the researcher or supervisor has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee c/-Research Services of this university.

Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

If you agree to participate in this project, you are asked to sign both copies of the consent form, retain one copy for your records and return the other copy to the researcher.

Yours faithfully

Dr J. Dorman Supervisor Barbara Jack Student Researcher

APPENDIX H

ETHICS APPROVAL