Equity theory predictions of the effects of participation in justice or Police studies on the promotional expectations of members of the Western Australian Police Force

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EQUITY THEORY PREDICTIONS OF THE EFFECTS OF PARTICIPATION IN JUSTICE OR POLICE STUDIES ON THE PROMOTIONAL EXPECTATIONS OF MEMBERS OF THE WESTERN AUSTRALIAN POLICE FORCE.

By

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A Thesis Submitted in Partial Fulfilment of the Requirements for the Award of Bachelor Of Arts (Justice Studies) (Honours) in the Faculty of Health and Human Sciences Edith Cowan University.

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
ABSTRACT

Before 1988 police in this State were promoted solely on seniority. No university courses for officers existed locally and education played little part in promotion. Promotion is now on the basis of merit and Edith Cowan University conducts courses in Police and Justice Studies.

This study investigates possible links between the factors of higher education and merit based promotion. Predictions of student officers' of the benefits of higher education, organisational commitment and various aspects of non-promotion were examined by use of a questionnaire.

The results showed that student officers placed a higher value on education for basic police work and managerial ranks. They also considered that they should receive preference for promotion over officers without degrees. There was no differences in current levels of organisational commitment but student officers appeared more likely to experience greater reductions in work effort and desire to remain with the Force if not promoted. They were also found to place greater value on positions using their qualifications as compensation for lack of promotion.

Problems and suggested solutions arising from these findings are discussed.

Signature.... Date.......................... 17th May 1995
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CHAPTER ONE: THE PROBLEM AND ITS SETTING

INTRODUCTION

This study will analyse the effect of two recent developments in the Western Australian Police Department: the availability of degree programs at Edith Cowan University in areas directly applicable to the work of members; and a promotion system based upon merit rather than seniority. The aim will be to investigate a series of hypotheses designed to test whether or not some specific relationships between these two factors exist.

More specifically it will investigate whether or not officers who participate in Police and Justice Studies at Edith Cowan University place a greater value on the benefits of higher education for police officers and managers; have a greater expectation of promotion than those members who do not attend university; and whether or not there are likely to be any links between such education and future attitudes to certain aspects of life as members of the Force.

In the near future it is likely that graduates will form an increasing proportion of the total Departmental strength and it will become important to understand how and why these factors are going to influence their perceptions about their careers.

BACKGROUND AND SIGNIFICANCE

The Western Australian Police Department has been in existence since 1829. It currently has an strength of 4211 men and women of various ranks.
deployed throughout the State in a variety of distinct Branches (Annual Report, 1994). The major sections are Criminal Investigation, General Duties, Traffic Patrol, Liquor and Gaming and Prosecuting.

The Department is the primary law enforcement agency for Western Australia and, as such, carries the major responsibility to the people of this State in relation to the protection of life and property and the detection and prosecution of those responsible for the commission of criminal offences. It is a net user of tax payer's funds with an annual budget of approximately $268m (Annual Report, 1994). The estimated cost of training and equipping a new officer is $50,000. (Personal communication from Personnel Branch of Police Department).

Given the costs involved in training officers and running the organisation together with the significance of the Department's functions, the collective efficiency of its personnel and practices is of great importance. This view is reflected in the stated objective of the Personnel Branch which is:

To ensure the development and implementation of appropriate personnel management systems and maximise productivity and job satisfaction spanning the career of all members from recruitment to retirement and beyond. (Annual Report, 1994, p. 35)

Any aspect of current policy which may detract from this objective warrants careful consideration.

From its earliest days and until relatively recent times promotion for all members of the Department, except those at the most senior ranks of
commissioner and assistant commissioner, was essentially on the basis of seniority. Once an officer had passed the requisite internal examinations in law and procedures advancement was on the basis of time spent in the job and positions becoming available through retirements, resignations and increases in total staff numbers. In theory candidates could be rejected because of some perceived problem but, in practice, this rarely happened.

Any person joining the Department could make a fairly accurate prediction of the rate at which they would receive promotion. This predictability of advancement had obvious benefits to the individual who was able to anticipate factors such as rank at various stages and this in turn influenced such matters as salary and retirement benefits.

In relation to education, unlike many occupations such as teaching, nursing and most professions, police officers in this State have not previously had available to them any sort of structured tertiary education designed especially to equip them to do their job. Some officers obtained degrees from universities in disciplines such as psychology, business, and management but they were the exception.

The above two factors have changed dramatically since 1988. In that year Edith Cowan University commenced the Associate Diploma in Justice Studies which was designed for police, prison and Crown Law Officers. The University now also conducts degree courses in Justice and Police Studies and will shortly commence a masters course in this area. These courses involve studies in disciplines such as psychology, criminology and law and are designed to provide students with a sound education in subjects believed to be important for personnel in these occupations.
In 1989 the Police Department introduced a merit-based promotion system for those seeking advancement to commissioned officer level and in 1992 the use of this selection method was extended to include those applying for promotion to sergeant. This system allows officers who have completed eleven years of service and reached the rank of senior constable to apply for promotion to sergeant and then senior sergeant and commissioned officer ranks.

Police officers who are seeking promotion must initiate the selection process themselves by submitting their written applications for consideration when vacancies are advertised. These are assessed in relation to their content and successful applicants are then selected for interview. The final selection is made by a board on the basis of the candidate's written submission and performance at the interview. In all cases, at present, educational qualifications are only specified as being a desirable attribute.

It may well be the case that those who apply for promotion have a belief that they are the most suitable applicant for the particular position. In the context of the present study this factor of self-initiated candidacy may have important consequences as rejection under such circumstances has been linked with reduced commitment to the organisation (Schwarzwald, Koslowsky and Shalit, 1992). Thus the candidate's perception of their suitability for promotion combined with continual rejection of their applications may have an adverse impact on morale. This perception of greater personal suitability in comparison to others could be based on a variety of factors such as work experience, special attributes, training or education. Because the new system is competitive, candidates must endeavour to convince the selectors that they are superior to others vying for the same position.
Given the high value placed upon the skills provided by university education for many occupations (Johnson, 1990) one needs to consider whether or not police officers who undertake such studies will also acquire the same views and come to consider themselves as being superior candidates to their less well educated colleagues.

Bearing in mind the above factors of self-selection and increasing levels of education the question arises as to what links may exist between possession of tertiary qualifications and any perception of greater suitability for promotion which graduates may develop. These two elements will form the basis of a major hypothesis of this study involving Equity Theory predictions of the outcome of promotion decisions for such persons.

Of the 139 officers currently studying at Edith Cowan University 106 are constables, 31 are sergeants and 2 are commissioned officers. The number of vacancies for sergeants currently being advertised each year is in the order of 60 (personal communication from Personnel Branch of The Police Department). Bearing in mind that the majority of students are constables, who must serve eleven years before being eligible for promotion to sergeant, there may well be an accumulation of tertiary educated officers competing with others for the limited number of positions becoming available each year unless they leave the job for whatever reason.

The possibility exists therefore that lengthy delays in promoting graduate officers may affect their morale and their commitment to the organisation to a greater extent than non-graduates. Such a lack of commitment has the potential to impact adversely on performance and/or retention of staff.
Conversely, any steps taken to enhance their promotion may alienate the less well educated officers who may, for different but no less valid reasons, consider that they are more deserving of advancement. Bearing in mind the cost of training replacement personnel and the need to maintain high morale and commitment in what are increasingly difficult times for police officers this situation is one requiring consideration.

PURPOSE OF THE STUDY

Within the Western Australian Police Department those who are enrolled for Police or Justice Studies now form a distinct group. This research is designed to examine their attitudes to various aspects of the police working environment.

The completion of a university degree is a substantial educational achievement requiring high levels of academic ability, application to study over several years and considerable financial cost. This study is designed to examine whether or not police officers who are studying for such qualifications have a higher regard for the benefits of such courses and/or a higher expectation of promotion than those who do not undertake such studies. It will also consider whether or not student officers currently differ on a measure of organisational commitment and also if future promotion decisions are likely to be the cause of changes in their attitudes towards the organisation.

The literature review will show that this involves several factors which, individually and collectively, may serve to create a complex problem which can result in a range of feelings and associated behaviours and problems on
the part of those involved which in turn can have important and serious consequences for the organisation as a whole (see Figure 1).

Figure 1

A MODEL OF THE FACTORS INFLUENCING THE ATTITUDES OF NON-PROMOTED TERTIARY EDUCATED OFFICERS.
FRAMEWORK

The following will provide a guide to the content of the Literature Review to assist in placing what follows in context. The structure of the research and the Literature Review is based upon the elements identified as being involved in the problem under examination as set out in Figure 1 above.

The first two elements are merit-based promotion and higher education. These elements are the independent variables of the study and they are given factors which have been imposed upon the members by external forces.

Career plateauing is a common phenomenon in many areas of business but a relatively new facet of life in the Western Australian Police Force. It can be a consequence of a merit-based promotion system and can lead to changes in attitudes of employees towards their organisation, for instance commitment. Similarly, higher education has been shown to have an impact upon commitment and, unless handled carefully, the consequences can be detrimental for both employees and the group.

Equity Theory can be used to point out the links between the dual existence of a merit-based promotion system and higher education amongst a select group of employees. This relationship also may have undesirable consequences for the organisational commitment of employees.

As noted, the above factors impact upon commitment. Reductions in the level of this construct amongst personnel has in turn been identified as being responsible for increases in undesirable consequences such as absenteeism, tardiness and increased turnover. As the final element of the
argument will suggest these unwanted aspects can be the cause of increased costs associated with retraining, recruiting and decreased efficiency and morale.

Each one of these elements is discussed in full in Chapter 2.

RESEARCH QUESTIONS

As noted above the purpose of this study is to inquire as to whether or not exposure to university education has an influence over police officers' perceptions of the value or benefits of such courses to general police work and higher managerial ranks within the Force. It will also examine the current level of organisational commitment of both graduate and non-graduate officers together with their perception of their own suitability to carry out functions at various levels. Further, if they are found to believe that they are more deserving of promotion, whether or not being unsuccessful in this area is likely to have any consequences in respect of their future performance and job attitude or if this factor can be compensated for by other means.

The following specific hypotheses will be tested, that is, do officers taking degrees in Justice/Police Studies:

1 believe a university education provides important police skills;
2 believe a university education should be a pre-requisite for promotion;
3 believe that they are more deserving of promotion by virtue of their education;
4 have a higher level of organisational commitment;
5 experience a greater reduction in organisational commitment if not promoted; and
6 place a higher value on positions which use their special skills as compensation for lack of promotion.

These specific areas will be explored by means of a 47 item questionnaire scored by a 7 point Likert scale. (Refer to Appendix for the questionnaire).
 CHAPTER TWO: REVIEW OF RELATED LITERATURE

MERIT BASED PROMOTION

The choice as to which personnel to promote within any organisation can be decided in a variety of ways. Two such methods are known as the merit-based and seniority systems. Both have been used in the Western Australian Police Force with the former now being the preferred method for selecting those who will advance to the rank of sergeant and above. Both systems have been examined over the years and have been found to have advantages and disadvantages and the choice of which method is most productive in a given situation is dependant on a number of factors.

Dobson (1988) claimed that a merit system has the following disadvantages:
1. the possibility of impairment of labour efficiency;
2. the addition of a considerable burden on the hiring process;
3. the reduction in incentives;
4. the removal of a worker's personal development;
5. the inhibition of technological change; and
6. increased intra-union conflict.

Conversely, seniority systems are viewed by the same author as having the following advantages:
1. clear career paths and succession planning;
2. comprehensive training;
3. low labour turnover;
4. objectivity;
5. high morale;
6 reduced trade union militancy;
7 decreased wage costs;
8 increased efficiency; and
9 protection for older workers.

In a subsequent study Dobson (1990) identified further aspects of the merit approach which can be the source of problems within an organisation. These are:

1 having a negative impact on morale within the organisation if it is seen as unfair;
2 encouraging certain behaviours that are detrimental to the efficiency of the organisation;
3 overcoming the problem of making due allowance for the external environment in measuring performance; and
4 the cumulative effect of promotion decisions as being harmful to the organisation.

Bacharach (1989) suggests that merit systems discourage cooperation and sharing of job knowledge by forcing competition. Such systems were also considered to weaken open communication about aspects of personal performance which may need improvement due to the obvious implications for the individual's advancement. Wisdom (1989) cautions against the uninformed use of merit systems. One question to be decided before implementation of any such system is whether or not the organisation is one which runs best when employees cooperate in groups or if it is of a kind best operated by hard-driven, competitive individuals. If cooperative effort is considered more important than competition, teamwork valued above individual initiative, then merit systems must be viewed with caution as they convey an implicit assumption that one person's gain
is another's loss.

In a local study of such systems undertaken for the Western Australian Police Union, Savery (1994) points out that the nature of police work is such that a merit system will have the tendency to cause more experienced officers to refrain from their traditional role as training officers of younger colleagues in order to reduce the threat of competition from this source. He also suggests that such a system within the context of the Western Australian Police Force may lead to a break-down in the level of teamwork displayed by members if a "jobs for the boys" perception arises amongst the rank and file. A promotion system which incorporates some elements of a seniority based system is seen as helping to prevent this kind of situation.

Conversely, some authorities consider that the seniority method leads to mediocrity. As noted by Altman (1989) junior employees are negatively influenced and can lack motivation as hard work, qualifications or excellence at their jobs will not overcome the requirement to wait their turn for promotion. Reynolds (1988) argues that merit based systems stimulate professionalism and competency in government employees whilst seniority methods tend to push the organisation towards mediocrity.

Regardless of the variety of opinions about the benefits and shortcomings of the two systems the fact is that the members of the Western Australian Police Force are now required to compete for advancement under a merit system. A major factor in this present study is the perception of any officer applying for promotion as to the equity of the system. This relates to the first point made by Dobson (1990) regarding the negative affects which may arise if the system is perceived as unfair.
HIGHER EDUCATION

For centuries those responsible for selecting and training people for the professions and the civil service have advocated a liberal arts education for entrants (Johnson, 1990).

Exposure to the study of foreign languages and literature and practice in written composition and oral expression provides skills in analysing and solving problems and the ability to clearly put forward one's own views on a variety of matters. This form of education gives students the ability to read difficult and complicated texts with understanding, to see the central issues in human situations, to apply historical, philosophical and social approaches to problems and to express themselves clearly and vigorously on a range of issues. Johnson (1990) quotes from a publication of the OECD:

Some of the skills that highly skilled personnel need to possess can be acquired through continuing professional education. This is particularly true for the skills required to increase adaptability, to cope with the increased interdependence of tasks and to develop the ability to react to new, unforeseen and unforeseeable situations. (p. 18)

Anderson (1990) states the widely held view that professional people, for instance doctors, lawyers and engineers, require a liberal arts education, in addition to technical training, in order to give them practical problem solving skills and a sense of the community in which they intend to practise. This final area of knowledge would appear to be very important for police officers who are required nowadays to function within a society which is made up of people from extremely diverse ethnic backgrounds.
Knowledge of other cultures would give officers a better understanding of how they are perceived by other people and the ability to deal with them more effectively.

This philosophy about the value of a liberal arts education, which has influenced the established professions for many years, has been applied in recent times to other occupations which are moving towards professional status. The work of school teachers reached this level some years ago. In more recent times nursing has been undergoing similar changes. Men and women engaged in this occupation have progressed from being merely agents to ensure the well being of patients in respect of routine matters such as comfortable bedding and routine administration of medication prescribed by others. They now interact more directly with doctors in deciding upon the appropriate treatment and this can be attributed to more advanced university training. (Anderson, 1990, pp. 22-40)

As noted by Altschul (1983) higher education has played a major role in the development of nursing theory and practice and has assisted greatly in the development of the status of this profession and its practitioners. Nurses needed to develop the ability to question and argue about their occupation, to investigate and evaluate the work of others engaged in the area, to be able to defend their own views and ideas and to accept responsibility for their professional judgement. University education was seen as the means of acquiring these attributes in conjunction with the basic skills of their occupation.

It was acknowledged by Altschul (1983) that before nursing could call itself a profession it had to develop a body of knowledge in the area. Prior to the increase in higher education for nurses it was rare for them to speak at
conferences about their work or to publish research articles in their journals. This situation has now altered dramatically with highly educated practising nurses engaging in research leading to higher degrees and adding to the required body of professional learning.

Members of the nursing profession are frequently called upon to make judgements about complex matters under circumstances of some urgency. As pointed out by Malek (1986) nurses are members of a profession in which situations change rapidly. They cannot depend upon routine behaviours, procedural manuals or traditions when making decisions. They must acquire the skills necessary to allow them to make decisions based upon sound, rational grounds in order to be able to react appropriately under the stress of fast paced clinical situations.

Two major attributes in this process are critical thinking and creative thinking (Sullivan, 1987, p. 12). Critical thinking is defined as the ability to analyse and solve problems logically. Once acquired this skill enables nurses to deal with a variety of complex situations relating to patient care. Creative thinking is said to enable nurses:

To recognise and react to unique elements in an otherwise well known and seemingly ordinary setting, together with the skill to analyse problem situations and arrive at suitable solutions.

According to Klaassens (1988) there is no consensus as to whether or not these particular thinking skills are principally the result of innate abilities or can be acquired or improved by means of education. However, many university courses for nurses are based upon the belief that education has a role to play in this area and that critical and creative thinking can be taught.
practised and continuously reinforced in nursing education.

The effectiveness of exposure to various levels of higher education in imparting these skills to nurses has been examined by Pardue (1987). Nurses with educational qualifications ranging from diplomas to master's degrees in nursing science were surveyed on a range of topics related to their occupations. This research revealed that nurses with the higher qualifications scored significantly better on tests of critical thinking ability. Pardue (1987) also notes, with interest, the fact that nurses from all educational levels rated experience as the most important factor influencing decision making with knowledge the second most important factor.

As noted above many situations encountered by nurses require quick assessment of complex situations and the application of knowledge and experience under circumstances of constant change and considerable stress. A parallel can fairly be drawn between this occupation and that of the police officer.

Police officers are frequently required to perform their duties under stressful and dangerous circumstances involving distressed or violent people. The particular circumstances often dictate that immediate action is required to control or contain a dangerous situation. Notwithstanding this need for prompt action officers must still be conscious of the fact that they can be dealing with the liberty and/or the life of someone and any decisions which they make are frequently subjected to scrutiny by others after the event.

The numerous factors involved in many situations calling for police attention and the complexity of such situations is recognised. In their text on the rational exercise of powers in the criminal justice system Gottfredson
and Gottfredson (1990) deal at length with the elements involved in such situations. They state the view that personnel from all agencies of the justice system, including the police, need to place greater emphasis on rationality when making decisions about the manner in which they will deal with persons coming under notice. They define a rational decision as:

That decision among those possible for the decisionmaker which, in the light of the information available, maximises the probability of the achievement of the purpose of the decisionmaker in that specific and particular case (p. v).

Gottfredson et al (1990) deal with the exercise of discretionary powers in decision making in the types of situations commonly faced by police officers, including decisions to prosecute by way of arrest or other means or to opt for some alternative course. As noted by Gottfredson et al (1990, p. 54) the decision whether or not to arrest is rendered more complex once the legitimacy of discretion, the diversity of goals and the range of alternatives are realised.

On the point of rationality Goldstein (cited in Gottfredson, et al. 1990, p. 54) states:

Little skill and talent are required to crudely apply a uniform solution (like the criminal justice system) to an array of different problems. Diagnosing a situation and selecting an appropriate method for dealing with it are much more challenging tasks.

Police forces in many countries, including Australia, have also been making substantial progress towards professionalisation and, as is the case with
nursing, university education is central to this change in approach. The overwhelming majority of writers on the topic are in favour of this although there are some dissenting voices. The reasons put forward by the advocates of such training vary from simply teaching officers to be more efficient and professional in the performance of their traditional role to the more progressive view that graduates should be the agents who will bring about fundamental changes to the very nature of the police function.

An early advocate of higher education for police officers at all levels and the need to improve the nature of the work itself was an American police chief August Vollmer (cited in Sherman, 1978, p. 18) who stated:

> It has yet to be recognised that the work of the modern policeman requires professional training comparable to that for the most skilled profession.

Sherman (1978) makes a variety of interesting points in favour of higher education for police officers albeit from an American perspective. Since the turn of the century in that country, reports on various occupations have resulted in improvements to educational standards within the professions of medicine, engineering and forestry. By the mid 1970s the same views as to the need for improvement were being voiced about policing (Sherman, 1978, p. xi).

By 1978 the view had developed that fundamental changes were required in respect of the functions of the police and their role in society (Sherman, 1978). Police Forces were being encouraged to:
Find new methods and organizational structures and a more effective role in society for coping with crime and providing social justice. (p. 1)

These changes were seen as one of the most important objectives of police education. As pointed out by Sherman (1978, p. 4) the majority of police work is in fact concerned with social work issues and not the criminal justice system. It is linked to matters such as health care and social services and police officers need education and skills to enable them to recognise and solve problems in such areas. It was, no doubt, recognition of this situation which prompted Vollmer (cited in Sherman, 1978, p. 16) to comment that "The policeman is no longer the suppressor of crime, but the social worker of the community."

Sherman (1978, pp. 20-21) also points out that police forces are virtually the sole government agency which can be called upon by citizens in distress 24 hours a day 365 days of the year. In relation to the proportion of total time spent by police attending to matters relating to crime Misner (cited in Meadows, 1986, p. 14) found that 75% of an officer's time is spent on non-crime related matters. Similar findings were reported by Reiss (1971, p. 45) who found the figure to be as high as 83%.

One of the arguments advanced against university courses for police officers is that there is insufficient proof that such education is necessary for performing police tasks. In countering this position, and defending higher education for police officers, Sherman (1978, p. 177) points out that the ability to do a job as presently structured is not the same as the competence to devise ways of changing the nature of the job itself. Higher education can provide the skills necessary to enable officers to act as the agents of such
As noted above, there do exist opinions which caution against over-education in occupations not requiring such levels of training and the dangers of producing over-qualified and, ultimately, frustrated and dissatisfied workers, for example, The Carnegie Foundation for the Advancement of Teaching 1977 (cited in Sherman, 1978, p. 178).

In rejecting the above viewpoint Sherman (1978) points out that an improvement in the aggregate level of education within any work group can lead to changes/improvements in the nature of that job. There are many paths leading to the acquisition of the skills required for a particular occupation and a university education is not the only method available. Whilst many people are able to develop such abilities through their own resources the probability that university educated people will have these qualities is greater. (p. 177)

This perception of the need to expand and improve tertiary education for police officers has continued in America, Britain and Australia and is still being actively pursued.

Some thought provoking comparisons between the educational and class distinctions separating the overwhelming majority of British police of all ranks and those in the professions and the military in that country have been drawn. (Worsthorne, 1983)

As he pointed out the general level of education of senior police officers and rank and file members is far lower than that of some other sections of society. More importantly, an increasing number of criminals who become
involved in modern sophisticated crime such as fraud, pornography, drug trafficking, tax evasion and white collar crime are from the upper socio-economic levels of society. This is in marked contrast to the original situation existing in 1829 which gave rise to the formation of a police force where they were intended to control crime and disorder amongst the lower classes. Worsthorne puts the viewpoint that if the modern police service wishes to combat the new criminal class then a significant number of their ranks must be drawn from this group.

The same need has been identified by a number of commentators on the contemporary Australian crime scene. Mr F. X. Costigan Q. C., chairman of the Painters and Dockers Royal Commission (1982) stated:

Police forces do not have sufficient personnel of the appropriate intellectual capability and training to undertake that difficult analysis of facts which is necessary to identify major criminal organisations... (Volume 2, Para. 10. 24)

On the subject of the changing nature of police work Cioccarelli (1989, p. 34) notes that "policing is an occupation demanding fine judgement in difficult circumstances and the exercising of quite formidable discretion". In respect of the exercise of discretion a former Chief Justice of the United States Supreme Court Warren Burger (cited in Cioccarelli 1989, p. 35) observed that:

The policeman on the beat or in the patrol car makes more decisions and exercises broader discretion affecting the daily lives of people every day and to a greater extent in many respects than a judge will ordinarily exercise in a week.
These observations on the nature of police work, the exercise of wide discretion and decision making powers would support the argument that higher education for police officers has become a most important issue.

In 1988 David Bradley, then Dean of Studies at the N. S. W Police Academy, wrote in the N. S. W. Police News of his views of the nature of modern policing and the need for and purpose of education for police officers. In his opinion policing can no longer be considered a simple set of activities commonsensically engaged in by people having, on average, less formal education than those they serve. Modern police work requires thoughtful, well educated, intellectually sophisticated but highly practical professionals.

On the point of professionalisation of policing Klockers (cited in Bradley, 1988, p. 24) states:

Our society only allows one path to the status of true professional; it must begin with a long period of education in an accredited professional school at the college or post-graduate level, include or continue through a period of supervised internship and conclude with the granting of a licence without which one cannot practice that profession. No true profession, neither medicine nor law, engineering, accounting, teaching, social work, nursing or clinical psychology, has ever achieved genuine professional status in any other way.

A great deal of research has been carried out in relation to the practical effects of higher education for individual police officers and their departments. Officers holding university degrees were found to approach various aspects of the job differently (Taylor 1983), were less dogmatic and
rigid in their attitudes (Roberg 1978), and expressed less authoritarian, conservative and rigid attitudes (Dalley 1975). They were also found to be better able to understand the causes, and cope with the problem of trying to eradicate crime and its influences from the community (Eastman and McCain 1973).

There are views to the effect that higher education can have a detrimental impact on police organisations due to the fact that some officers perceive their departments as being unable to provide job satisfaction for personnel who are over-qualified. The more highly educated officers experience greater levels of frustration and dissatisfaction as their expectations are higher than the job can provide (Glenn and Weaver 1982). The restrictive environment of police departments has been suggested as the cause of higher turnover amongst more highly educated personnel (Griffin, Dunbar and McGill 1978).

Barry (1978) found higher levels of job satisfaction amongst better educated officers despite any preferential treatment regarding salary or promotion. More highly educated police managers have been found to be more creative in devising new supervisory methods (Wycoff 1987). Research by Carter and Sapp (1989) suggests that misconduct or negligence is lower amongst the more highly educated officers and Cohen and Chaiken (1973) reported that such personnel received fewer complaints and disciplinary charges, took fewer sick days and suffered fewer injuries.

Buckley (1991) investigated the perceptions about various aspects of their work held by police officers with and without university degrees. Although this research dealt with many matters which are not part of the present study its findings on some aspects are relevant. Those with university
exposure more strongly agree that such education has overall value for police forces. They believe that a university education enhanced performance and that work experience and departmental training are insufficient to produce effective police officers. Whilst graduates believe in the utility of university education they do not value it as highly as might be expected. Their responses showed either less disagreement in comparison to non-graduates or the more neutral response of neither agree nor disagree.

Notwithstanding this widespread and well researched body of opinion in favour of higher education and professional status for police officers there are those who caution against an uncritical acceptance of the alleged benefits.

In Australia Settle (1983) discusses various objections to the wide-spread acceptance of the benefits of such activity. Firstly, he points out that university education is radically different from job training. The latter provides skills required to perform a particular function whilst the former should involve broadening and deepening one's understanding of conceptual frameworks. The value of training is accepted but the belief that university education necessarily produces better police officers is more open to question.

Following on from the first point Settle states that whilst those engaged in training must be thoroughly conversant with the requirements of the particular occupation those engaged in education must maintain their independence so as to ensure that they and their students are able to engage in free and critical enquiry. He sees a danger in allowing any overlap between the two concepts. The third point discussed is the ability of higher education to raise the public perception of the police service and its
members. Settle believes that the low image of the police held by many sections of society is so entrenched that no amount of education will improve it. (Settle, 1983).

Finally, on the point of whether or not higher education increases morale within the force Settle has reservations on the matter. He points out that compulsory departmental training already occupies a considerable proportion of an officer's time and that any attempt to require personnel to undertake additional study to complete a university degree for promotion purposes is likely to have disastrous consequences for those already burdened with training courses. Additionally, any suggestion that police departments are forming an academic elite is likely to detract markedly from morale and to damage the sense of group loyalty and solidarity which many see as being vital to the police role. (Settle, 1983).

In their article entitled "Chasing Vollmer's Fancy" Bradley and Cioccarelli (1989, pp. 1-13) deal at length with the philosophical questions of the nature of our changing society, police work and efficiency and the need for higher education for both rank and file members and management. This work deals with the situation in Australia and provides thoughts relevant to the present study. As discussed by Bradley et al (1989) the social order has changed and is likely to continue to change. This process is having a major impact on police forces and their management. Changes have occurred in social institutions such as the family and marriage, we now accept less authoritarian methods of child raising and people are better educated and more aware of their rights. They travel more widely and receive exposure to a more diverse range of cultures and value systems.
Society has lost some of its ability for self-control and maintenance and these functions are increasingly performed by specialist government agencies. Society has become both harder to police and more in need of the services of a police agency. We have become a more criminal society whose members are increasingly alienated from each other and, in the Australian context, this is compounded by our cultural diversity. Police officers are also subjected to this process and this makes it more difficult to perform police functions in a system which relies so heavily on public participation and co-operation. (Bradley et al, 1989).

Police forces have become larger and individual officers and their superiors are more often strangers to one another. This factor has resulted in a move towards the use of more indirect and formal methods of supervision and control. In addition, the growth of various tasks such as personnel matters, budgeting, research and accounting have taken manpower away from the actual task of policing.

All of these changes have created a need for police authorities to reflect upon their role in society in order to understand existing policies and their underlying philosophy and to consider the need for new directions and methods. As highlighted by Bradley et al (1989), when policing had the room to reflect upon itself it had neither the inclination nor the capacity to do so. When the demand for self-reflection came it was too late and a critique of modern policing was provided from outside the service.

These examinations of police agencies, which have been taken place in the United Kingdom and Australia, have produced evidence of serious deficiencies in the senior management of police services. Studies have highlighted problems of mismanagement and under-management together
with a poorly articulated moral-philosophical foundation for policy making. As a result various commissions and inquiries have imposed a range of reforms on police services in an effort to rectify the problems identified (Bradley et al, 1989).

One area which has received attention is that of education for police officers at both the basic constable and management levels and Bradley et al (1989) make some definite recommendations in this regard.

Firstly, basic police education must equip those at the grass-roots level with the skills to perform their functions efficiently in the context of a modern society. They believe that we need to move away from the artisan or limited expert view of police work, with its emphasis on short, sharp and factual vocational training towards the concept of the full professional model and its greater reliance on higher education, longer training periods and the acquisition of improved professional skills. This will lead to an enhanced performance of a role which is viewed as too demanding and complex for the semi-educated.

Secondly, this education process must be continued throughout an officer's career in order to provide the skills necessary to be effective managers. Bradley et al (1989) attribute many of the current problems associated with inefficient management to the situation whereby police managers have a great deal of negative power over subordinates in terms of procedural accounting but little in the way of direct supervision over their substantive actions. Management practices must change and education and training is required in this area which is guided by the doctrine or philosophy of the professional model of policing.
Bradley et al (1989) suggest that these changes need to be guided by an understanding of the following principles. Firstly, the principal of product connectedness requires that police management never loses sight of the nature of their function. They must develop a deep understanding of, and an interest in, the operational realities and needs of policing based on some years of practical experience carried out at a high standard.

Secondly, police management education must accept the possibility that the kinds of problems facing policing are not necessarily the same as those of other organisations. There may be an overlap but it is incumbent on police managers to accept responsibility for ongoing research in this area to provide improvements to existing practices.

Lastly, the kind of management education received by police managers must be based upon and drawn from the knowledge of experienced officers so as to maintain a relevance to practical policing needs.

Although Bradley et al (1989) are strong advocates of reforms in the areas of police management and education they also caution against allowing those with higher education to use such qualifications to simply escape what they may, mistakenly, view as a mundane position in the lower ranks. Higher education must not be seen as "a ticket to help in the flight from grass roots to promotion". The foundation of police work requires a fundamental revision at the professional skills level.

One solution to the need to increase the overall level of education and professional skills in police services would be to recruit university graduates directly with a promise of rapid promotion. In relation to the position in the United Kingdom, where a Graduate Entry Scheme (GES) to attract
graduates to the police service with such a guarantee has existed since the 1960s, serious problems have been encountered with this program.

The work of Hill and Smithers (1991) provides valuable information in relation to the above British experience with graduate entrant police officers which should inform anyone contemplating how best to recruit, train and promote those with higher education in Western Australia.

The 1962 Royal Commission on the British Police provided the catalyst for major changes to the police structure in the United Kingdom including the areas of education and the need to attract a higher calibre of officer destined for advancement to the highest managerial levels. Since that time police forces throughout Britain have actively sought to increase the percentage of graduates within their ranks. They have introduced the GES scheme and have also increased the number of graduates selected for straight entry to their forces without the promise of any special future consideration.

The GES was designed to identify those applicants for entry to a police force who were perceived as possessing above average leadership skills and to ensure their subsequent rapid promotion up through the ranks from constable to chief officer level. This method of selection and advancement was seen as providing senior officer material but also preserving a single tier entry system, thus avoiding problems with other personnel not given such favoured treatment.

As noted by Hill and Smithers (1991), by 1990 it had became apparent that the police services of the United Kingdom still faced a possible shortage of suitable chief police officers and it was realised that the GES had not been as successful as was originally hoped in the drive to recruit and train such
personnel.

Concurrently with the GES, the police service also increased the number of graduates enlisting directly into forces. As a result of these two initiatives, the number of graduate officers increased 40 fold between 1968 and the beginning of the 1990s. However, the bulk of this increase occurred during the period 1979 to 1983 which, for the United Kingdom, was a time of economic downturn, a marked rise in unemployment - which hit graduates more than others - as well as a 45% increase in the number of students graduating from universities and colleges. Hill and Smithers (1991) attribute the rise in the numbers of graduates in Britain's police forces to these factors rather than to any dramatic improvement in the nature of police work.

Since 1983 graduate recruitment to the forces and the overall educational standard of applicants has fallen slightly. An increasing proportion of graduate entrants do not apply for a place on the GES and this is viewed as support for the view that the police service is now seen as a career which can attract graduate level applicants without having to promise special incentives.

Sufficient information is now available about graduates in British police services, both GES and standard entrants, to enable us to form a view on the efficiency of such arrangements which can be used to give guidance as to how successful such methods are likely to be if implemented in this state.

There has been found to be a high positive correlation between recruit's academic qualifications and their career expectations. Lack of career prospects has been found to be a major reason for resignations by graduates.
and both of these factors have obvious relevance to the present study. The wastage rate for GES officers had reached 30% by 1989 and, of those who remained, only 40% had advanced beyond the rank of inspector. Bearing in mind that these persons were originally identified and selected on the basis of perceived superior leadership qualities this rate of failure is viewed as unacceptable particularly when compared with the attrition rate for non GES officers which varies from 4.4% to 13.7%.

Those entering the service under the GES have also been found to both cause and suffer from bias from colleagues who enter under less privileged circumstances. Because GES entrants are selected on the basis of perceived leadership potential, identified before gaining any experience of police work, and then promoted after spending only a few years in the lower ranks, this creates resentment amongst other officers. Many non GES entrants see them as lacking sufficient experience and understanding of police work as a consequence of their limited time spent in the lower ranks. This particular view would find support from Bradley et al (1989) who state clearly that managers must develop and maintain a full understanding and empathy for the work performed by the lower ranks.

Although there exists such widespread resentment against GES officers, amongst both lower and senior ranks, there is considered to be much less antipathy towards graduates who enter the force on equal terms with less well qualified people. This is said to be a result of both a great increase in their numbers and the fact that they prove themselves on equal terms through doing the job.

The suggestion is made that this kind of resentment has been the cause of the poor performance and high wastage rate of GES officers. In an attempt
to overcome these problems and continue to attract high class recruits with an identified potential for advancement to the most senior levels of the police service it has been suggested that an officer class should be created allowing direct entry of suitable graduates to the upper levels of management. Hill and Smithers (1991) point out that such a scheme is unlikely to be successful unless its impetus comes from within the forces themselves. Given the current resentment towards the likes of GES arrangements the likelihood of such support appears remote.

A more well reasoned argument against the creation of an officer class is based upon the unique nature of the police service and the work of the lower ranks, which forms the vast bulk of daily police operations.

Those in favour of such an officer class usually base their argument on the industrial and or military model which holds that to manage any group of people efficiently does not require one to have experience at the basic level of operations. This argument, according to Hill and Smithers (1991), loses sight of the fact that the front line of the police service invariably act on their own initiative and without any direct supervision in their contact with the civilian population.

It is this power over citizens, which constables exercise frequently, together with their ability to evade supervisors instructions if they are found to be inconvenient, which makes the police function unique. Because of the complexity and importance of the duties carried out by the lower ranks it is considered imperative to attract quality, educated personnel to this level of the organisation (Hill and Smithers, 1991). This view of the nature of the functions of the lower ranks is also in accordance with the current views of Bradley et al (1989).
Hill and Smithers (1991) point out that creating an officer class is likely to deprive the service of this vital level of expertise. A single tier system of entry can assist in ensuring policing of a high standard at both the lower and higher ranks whilst allowing all officers an equal opportunity to gain promotion.

As can readily be seen from the above, the issues of whether or not university education for police officers has overall merit and, if so, how best to recruit and handle such people, is a difficult one and no consensus exists on the subject. But, notwithstanding this, higher education for police officers in Western Australia is now well established and appears set to become a part of police life for a significant number of members for the foreseeable future.

The existence of such an important new influence in the local police environment and the information available in relation to the kinds of problems and solutions encountered elsewhere demonstrates the need to handle the situation with care.

CAREER PLATEAU

As noted by Burke (1989) the possibility of reaching a career plateau is quickly becoming a feature of modern working environments for many people and this may apply especially to those areas which have structured levels or ranks in the management areas such as police forces. This concept has been defined by Ference, Stoner and Warren (1977, p.602) as "The point in a career where the likelihood of additional hierarchical promotion is very low." They have described two distinct kinds of plateauing.
1 Organisational plateauing which occur when the organisation does not have jobs available in higher levels of management for the person.

2 Personal plateauing which refers to the case where a person’s abilities do not match the needs of the job which would normally be on the individual’s career path and the individual decides not to seek further advancement.

Stout, Slocum and Cron (1988) found that, over time, non-plateaued employees improved their levels of performance, indicated a desire to get promoted and believed that they were more marketable than was previously the case. Conversely, plateaued employees had lower promotional aspirations and believed themselves to be less marketable. They experienced a decline in commitment to the organisation, a greater propensity to leave and were less concerned with specific career issues.

The phenomenon has been studied with specific reference to police officers (Burke 1989). This research found that officers experiencing a career plateau started their police careers with the same attitudes and job orientation as their non-plateaued colleagues but later developed a non-work career orientation. Those experiencing a career plateau reported a more negative work setting as well as greater stress at work. They also experienced greater work alienation, less job satisfaction and greater intention to leave. These negative factors were all found to be associated with career plateau.

As noted by Burke (1989, p.85) there is some evidence that promotion is particularly important to police officers and this factor may contribute to the development of the above kinds of problems for officers in an organisation where this type of situation becomes more frequent.
Chao (1990) found that career plateau is responsible for many negative perceptions and behaviours amongst workers. As noted it is the perception of the individual employee as to their future progress which is crucial to their outlook and not the eventual reality of the situation. The perception of career plateau correlated significantly and negatively with intrinsic and extrinsic job satisfaction, career planning and organisational identification. Furthermore, these negative effects were most pronounced when perceived during the early years of an individual’s job tenure.

Chao (1990) also notes the rise in the incidence of this factor due to the baby-boom generation entering their middle-career stage and the situation whereby many organisations are reducing middle level management numbers in order to cut costs.

Some important points are raised with a view to overcoming the problems associated with this situation. Chao (1990) points out that, for many employees, there is a great difference between the negative connotations associated with reaching a career plateau and the positive outlook engendered by viewing such a position as the achievement of a career pinnacle. It is also suggested that attention to making particular jobs more challenging and rewarding can overcome such problems.

Ettington (1993) puts forward strategies for alleviating the problems associated with this aspect of working environments and suggests that their successful implementation is in the hands of senior management. He found that successfully plateaued employees were those who received assistance in the way of challenging work and supervisor support. Other helpful factors were confirmation of the employees worth and centrality to the organisation, salary increases and new job challenges. These aspects,
which are controllable by the organisation, can contribute significantly to
greater job and life satisfaction.

This modern approach to dealing with what can too easily be perceived as a
negative period in one's working life is contained within the title of the
article by Brooks (1994) "Moving Up Is Not the Only Option". She describes
three distinct types of plateauing which may affect workers and which call
for action on their part and that of their employers. Firstly there is
structural plateauing which refers to the situation where an individual has
reached his or her limit within an organisation and, ordinarily, must leave
the organisation to find new challenges and opportunities. Secondly,
content plateau which occurs when a person has learnt a job too well and is
bored with its predictable nature. Lastly, life plateau which relates to events
in the person's private life, often termed mid-life crisis.

Brooks (1994) suggests several strategies for dealing with these problem
areas. They involve training and skill up-grades, alternative monetary
compensation including improved pay methods such as skill-based pay,
structural flexibility allowing for job rotation and self directed work teams,
communication in the form of career counselling and candid feedback from
supervisors and, finally, greater recognition in the form of prizes and public
and in-house praise.

Brooks (1994) notes that innovative organisations are starting to accept that
plateauing is not a sign of failure, rather it is an indication of success in that
the employee has reached a stage of being fully competent at their job, has
untapped potential and could be doing more if appropriately challenged.
She also cautions that today's employees have a different set of values.
They place a premium on having meaningful jobs which enhance their
development and personal growth. Their loyalty is to themselves, their professions and careers and not necessarily to the organisation employing them. If they believe that their employer is not able to provide such opportunities for growth, variety and flexibility they are likely to seek an alternative.

This factor must now be considered in the context of the Western Australian Police Force. As noted in the introduction, prior to the commencement of merit-based promotion most members could be assured of advancement to superintendent. This position would be reached after a slow but steady advancement up through the ranks. As such a position would not be reached until the last few years of an officer's service it left little time to suffer the effects of a career plateau and become disgruntled and under-committed. The advent of merit-based promotion is likely to result in many members being passed over at a young age, giving rise to the above kinds of problems.

EQUITY THEORY

As noted above this area is central to the current research as it is the basis of important predictions regarding how graduate officers will perceive the value of their inputs to their work situation and what they may require in the way of outcomes in order to maintain a ratio which is considered to be equivalent to that of non-graduates. I have sought to combine the first two elements of merit-based promotion and university education in the sequence shown on the flow diagram (figure one) by drawing them together to formulate the basis of a hypothesis using Equity Theory.
The subjects of this study are police officers working within a large organisation comprising a wide variety of individuals who vary on a range of measures. The personal views which each officer holds concerning constructs such as education and promotion, the topics central to this study, may have an influence on their attitudes and behaviours and these in turn must exist within the framework of the organisational situation.

Human motivation covers the field of people's reasons for acting in various ways under a host of circumstances both private and work related. Work motivation is one such example and is applicable to the present study. This term has been defined by Vinacke (cited in Landy, 1989, p. 368) as follows:

Motivation concerns the conditions responsible for variations in intensity, quality and direction of ongoing behaviour.

This definition is applicable to the present purpose as the aim of the study is to examine whether or not the performance and/or attitude of graduate officers is likely to be more affected by lack of promotion than that of non-graduates.

Numerous theories have been advanced over the years in an attempt to explain the behaviour of individuals in this respect. These include Need Achievement Theory, Hertzberg's Two Factor Theory, Goal Setting Theory, Expectancy Theory and Equity Theory (Landy, 1989).

The circumstances of individuals involved in this study are that they will have expended considerable time, effort and expense in obtaining a degree, which they believe to be relevant to their chosen occupation, by the time they are eligible to apply for promotion to sergeant or commissioned officer...
level. This investment cannot be recovered. Such individuals may therefore look for some sort of reward for the effort expended and may compare their situation with that of others in the same organisation for the purpose of evaluating their own position. The circumstances of the problem under examination here lend themselves therefore to analysis by the use of Equity Theory.

Equity Theory is based very much on the work of Leon Festinger (1959) concerning what he termed cognitive dissonance. This was subsequently used as a basis of further work by John Stacey Adams (1965) for the expansion and development of a theory to explain why people react in various ways to external stimuli.

According to Festinger (1959, p. p 1-31) the theory of cognitive dissonance deals with the actions taken by people who are under the influence of mental processes caused by an internal imbalance which generates pressures to redress the situation. Based upon his own observations of people, and wide reading of the literature on attitude and behaviour, Festinger noted that rational human beings strive to achieve a consistency between their internal views of the external environment and their own conduct in relation to those factors.

For example, a person may be aware of the extent of medical opinion condemning cigarettes but be addicted to the habit of smoking. In such a case the internal belief, based upon medical opinion, is at variance with personal conduct. If the smoker wishes to continue to indulge in the habit faced with inconsistent knowledge of its effects on health then he/she must somehow discount the negative information about smoking or reduce the importance of the link between smoking and ill health and increased risk of
premature death.

If this cannot be achieved then psychological discomfort will continue and this pressure can be the motivating force influencing a variety of actions designed to deal with the unpleasant consequences of such feelings. The term "cognitive dissonance" is applied to this need or drive to highlight the mental nature of such inconsistencies. Festinger uses the term dissonance to mean the same as disequilibrium, inconsistency, hunger or frustration and consonance to imply their opposites. The term cognition is used to refer to knowledge, opinion or belief about the environment, oneself or one’s behaviour.

Festinger (1959, p.3) describes cognitive dissonance as:

An antecedent condition which leads to activity oriented toward dissonance reduction just as hunger leads to activity oriented towards hunger reduction.

According to Festinger (1959, pp. 18-24) dissonance may be eliminated or reduced by a number of actions.

1 Changing a behavioural cognitive element, namely changing the way we behave in a given situation so that the new behaviour is in harmony with the cognitive element.
2 Changing an environmental element, namely making alterations to the external circumstances so that they fit in with existing behaviour.
3 Adding new cognitive elements, namely adding a component to the concept of ones behaviour so that it fits more with the external environment.
Applying the above concepts to the circumstances of the present inquiry one may speculate that a graduate police officer's perception as to his suitability for promotion may be at odds with an external environment which fails to reward study with promotion.

J. S. Adams (1965, pp. 267-299) proposed a theory dealing with social exchange which he called a Theory of Social Inequity. This work drew heavily on the work of Festinger and others on the topics of the just distribution of wealth, power, goods and services in society. Adams uses two concepts to ground his own theory these being relative deprivation/gratification developed by Stouffer, Suchman, Devinney, Star and Williams (1949) and Homans (1961) idea on distributive justice. The postulates of Festinger are utilised for the purpose of describing the mental processes involved in reacting to any perceived inequity.

The concept of relative deprivation/gratification was developed by Stouffer et al from observations made of American service personnel. Members of the Army Air Corps, who possessed a high average level of education, had a high expectation of promotion based upon their own perceived abilities and the high potential for promotion which existed in that branch of the services. In contrast, members of the Military Police, who had low average levels of education and a low expectation of promotion based upon a traditionally low rate within that branch, had a low expectation of individual promotion.

The Air Corps members were found, on average, to be less satisfied with their status and jobs than the military policemen. This situation was believed to be due to the discrepancy between actual achievement and expectation of achievement. This belief was subsequently supported
experimentally by Gebhard (1949), Thibaut (1950) and Spector (1956).

Adams (1965) draws three important conclusions from these experimental results. Firstly, manifest dissatisfaction and other behaviours are responses to acutely felt injustice rather than directly to relative deprivation. Secondly, what is believed to be just is based upon relatively strong expectations, for instance, that educational achievement will be correlated with job status. Thirdly, a comparative process is inherent in the development of expectations and the perception of injustice, as implied by the term relative deprivation.

Distributive justice is a concept formulated by Homans (cited in Adams, 1965, p.272). He states that;

Distributive justice among men who are in an exchange relationship with one another obtains when the profits of each are proportional to their investments.

Profit is that which is received in the exchange less costs incurred. Investments in an exchange are the relevant attributes which each party brings to the situation. They include skills, effort, education and experience.

Two important points arise from the above. The first is that the theory of distributive justice also applies to two or more persons who are in an exchange relationship with a third party, for instance an employer. The second is that the theory of distributive justice emphasises the ratio of profits to investments.
A shortcoming of these concepts, highlighted by Adams (1965), is that they do not serve to allow predictions of the actions which people will take to actively redress any perceived imbalance. In developing his own Theory of Social Inequity Adams has sought to overcome this deficiency. His theory deals with the ratios of inputs to outcomes which people in exchange relationships form in their minds. Inputs are factors such as education, experience, sex and seniority whereas outcomes are things such as pay, promotion, job status, satisfying supervision in work environments and friendship and love in domestic situations.

Where the ratios of all parties to the exchange are equal equity exists. In those cases where the ratios are different inequity is perceived to exist and tension is created. What is of value in terms of inputs and outcomes is dependant upon the personal perceptions of those involved in the relationship.

Equity can exist where the inputs and outcomes are the same and also where the relative inputs and outcomes are different but the ratios are the same. Tension can be experienced where a party is either overpaid or underpaid but the latter situation will more quickly be the cause of actions to redress the imbalance. Any situation of inequity will result in action being taken to correct the matter. This may take various forms designed to affect the ratio by altering inputs or outcomes. Inputs may be altered and the ease of achieving this will be dependant on their nature. For example, sex, age or seniority cannot be altered but education and skill can be manipulated.

A person may alter his or her outcomes, for instance, by obtaining a pay rise or, less likely, a reduction. They may cognitively distort their inputs or outcomes rather than actually changing these elements. For instance the
utility of a university degree may be changed or the value of outputs to the
individual may be altered. A person may leave the field by either quitting
the job, obtaining a transfer or being absent from work more frequently.
They may also seek to influence the other party’s outcomes or inputs, either
in reality or cognitively, in order to strike a new balance in their
relationship. Finally, a person may choose a new object of comparison to
achieve this objective.

Since Adams introduced his theory several researchers have examined
various aspects of the theme of equity in social relationships and have
determined that a range of outcomes can operate to compensate for inputs.
As noted by Greenberg and Ornstein (1983), although Equity Theory predicts
that a wide variety of outcomes can influence behaviour, the bulk of the
research on the topic at that time had concentrated on pay levels as an
outcome.

The work of Greenberg and Ornstein (1983) demonstrated that a high status
job title could also operate in such a fashion provided that the recipient
believes that their new title has been earned. This finding is relevant to
members of a police force which is an hierarchical system having rank and
title combined with higher salary. Further research on the types of reward
capable of compensating for perceived inputs dealt with the quality of office
surroundings and demonstrated the capacity of such trappings of position to
be utilised in an equity equation, Greenberg (1988).

The research undertaken by Schwarzwald, Koslowsky and Shalit (1992),
which demonstrated that promotion decisions can create feelings of
inequity, reduced organisational commitment and other behavioural
outcomes is directly relevant to the present inquiry. Although their work
differs from the present study, in that it did not involve police officers and examined employees attitudes after promotion decisions had been made, the findings still appear relevant.

The work of French and Raven (1959) points out that promotion is considered to be a reward. Using this, Schwarzwald et al (1992) contend that workers who seek promotion - as is the case with police officers under the merit-based system - and fail to gain selection will feel disadvantaged relative to those who succeed because they will have applied believing that they are qualified for the position. Mention is made in the above article of the work of Stouffer et al on relative deprivation as support for the contention that unsuccessful candidates for promotion could be expected to feel disadvantaged.

The above survey found that non-promoted candidates suffered feelings of inequity when compared to their promoted colleagues and also reported lowered levels of commitment. Negative promotion decisions were also related to increased absenteeism. This study pointed out the likelihood that promotions based on self-initiated candidacies may have undesirable consequences for the organisation and that attention should be given to those who are unsuccessful in order to help prevent the development of attitudes which are detrimental to the group.

**ORGANISATIONAL COMMITMENT**

People working in all sorts of occupations exhibit a variety of attitudes towards their work, fellow employees, their profession or employer and these have been found to exert important influences over their performance.
An early example of important research in this area is that of Porter, Steers, Mowday and Boulian (1974, p.604) who described commitment in terms of the strength of an individual's identification with and involvement in a particular organisation. They suggested that it was characterised by:

1. A strong belief in and acceptance of the organisation's goals and values.
2. A willingness to exert considerable effort on behalf of the organisation.
3. A definite desire to maintain organisational membership.

A further important result of the research of Porter et al (1974) was the development of the Organisational Commitment Questionnaire, (OCQ). This is a 15 point instrument which has been used extensively since that time by many researchers to measure this construct in a variety of contexts. The reliability of this measure, as tested by Cronbach's Alpha, has been found to be very high, ranging from 0.82 to 0.93 (Mottaz, 1986; Mowday, 1979; Schwarzwald et al, 1992).

Porter et al (1974) concluded that organisational commitment was a construct distinct from job satisfaction and more strongly correlated with employee turnover. Further, it was suggested that job satisfaction is a function of the daily work performed and is more transitory in nature. This was in contrast to commitment which was found to be a more long term relationship with the organisation.

On the point of the long term nature of commitment Porter et al (1974) note that feelings of commitment could be expected to take longer to form in an individual's mind than those of job satisfaction. In terms of the present
research this raises a question as to whether or not the administration of the OCQ to a group of junior officers produces reliable results. Examination of the demographic data concerning length of service will show that the majority of those taking part in this survey have at least five years of service and are likely to have well formed views on this aspect of their careers.

This initial research by Porter et al. (1974) was followed up with further work on the concept by Mowday, Steers and Porter, (1979). In this instance the authors were concerned with summarising the large body of research which had been conducted by others since their own work in 1974 on the commitment construct. They concluded that there was reasonably strong evidence for the test-retest reliability and internal consistency of the measure as well as acceptable levels of convergent, discriminant and predictive validity. The reliability of the original OCQ questionnaire was confirmed.

This research by Mowday et al. (1979) also noted that because the nature of the items on the OCQ allowed respondents to easily comprehend the purpose of the test it should be used with caution where there is a possibility that respondents felt threatened by the nature of the questionnaire or where unsure how their answers would be used.

Further support for the existence of distinct but moderately inter-correlated constructs of job involvement, job satisfaction and organisational commitment was provided by the work of Brooke, Russell and Price (1988).

Since the early work of Porter et al. (1974), which viewed commitment as a relatively simple concept, further work has provided evidence that the construct is more complex and multi-faceted than was previously thought.
As noted by Meyer, Allen and Smith (1993) commitment is now accepted as comprising three elements: affective; continuance; and normative. The first refers to an affective attachment to the organisation, the second to the perceived cost of leaving the organisation and the last to an obligation felt to remain with the organisation.

In addition Meyer et al (1993) highlighted the current concepts in relation to the applicability of the three types of commitment to feelings about the organisation, one's profession, career, unions and employment. The above research by Meyer et al (1993) centred on nurses and followed on from previous work undertaken by Reilly and Orsak (1991) in the same field. Both works referred to the emerging data in relation to the separate ideas of commitment by nurses to their profession in addition to such attachment to a particular employer.

Savery, Soutar & Weaver (1990) investigated this concept in the context of the Western Australian Police Department using the OCQ and found that commitment was somewhat lower than would be expected for this type of organisation bearing in mind the dangerous nature of the job.

Although police officers have not yet reached the same stage of professionalisation as nurses, and are limited in their choice of alternative employers in the event of a conflict arising in ideals, the need to differentiate on these concepts, particularly for the more educated personnel, may be required in the future.

The concept of commitment to an organisation, as measured by the OCQ, remains a valid concept and its measurement continues to be the source of valuable information about people within such groups.
Research has been conducted for the purpose of investigating whether or not higher education has an influence on commitment. An early example of work in this area is that of Angle and Perry (1981) which showed a steady decline in commitment across eight ascending educational levels. This research was conducted with employees of public transport companies and 90% of the respondents were drivers. The authors of this article noted that their results on this aspect of the study were in keeping with the general consensus that lower levels of education tend to make employees feel less competitive in obtaining alternative employment and that this lead to a reduced tendency to leave. Bearing in mind the routine, unchallenging nature of bus driving this decrease in commitment with increasing education may have been due to the kinds of attitudes about intrinsic work rewards mentioned below by Mottaz (1986).

The existence of such an inverse relationship between increasing education and commitment was also noted by Mowday, Porter and Steers, (1982, p.30) in their review of the literature on the subject. Mowday et al cautioned however that, "... the results are not entirely consistent".

Since then further analysis of this topic has taken place. The work of Mottaz (1986) suggests that higher levels of education result in workers placing greater emphasis on intrinsic occupational rewards such as task autonomy, task significance and task involvement and less on extrinsic factors such as working conditions, salary equity, promotional opportunity, fringe benefits, salary and supervisor and co-worker support.

Where the organisation is perceived as providing these intrinsic rewards commitment tends to increase amongst the better educated employees but to decrease where the rewards are held constant. Mottaz (1986) discusses the
need, widely recognised by many managers, to upgrade occupations in order to prevent the problems created by lowered commitment, namely tardiness, absenteeism and increased employee turnover. Although many jobs are by their nature dull and repetitive, many do provide the opportunity for the application of imagination in the devising of new and more challenging methods of achieving objectives.
CHAPTER THREE: RESEARCH METHODOLOGY

INTRODUCTION

This research is a single phase, cross-sectional study using a questionnaire format and analysis of the data obtained using standard mathematical methods and the Statistical Package for Social Sciences 4.0 for Macintosh program. It is designed to examine the perceptions of police officers, with and without exposure to university education, regarding a range of issues predicted to arise as a consequence of the dual existence of higher education and a merit-based promotion system within the Police Department.

SUBJECTS

The group studied was police officers undertaking tertiary education in Justice or Police Studies at Edith Cowan University. A comparison group of non-student officers was also selected. The University's Student Services Branch provided names of students enrolled in the above courses and these were cross-referenced with the Police Department's computer stored seniority listing in order to determine which of these persons were serving police officers. This procedure also provided details of the rank and regimental police number for those selected. Two of the officers shown as students were already senior commissioned officers and a decision was made to exclude them on the grounds that they were less likely than junior members to be affected by any problems associated with promotion.

This list of student officers was grouped according to rank and a comparison group of officers not studying at Edith Cowan University, matched by rank,
was also selected. This was done by using a standard table of random numbers to generate the sequence of officers for this comparison group. In those instances where a choice made by random number coincided with that made on the basis of being a student the next name on the seniority list was taken instead.

Initially, this study was designed to examine the perceptions of the various matters mentioned above held by police officers having any form of university education. Records were available from Edith Cowan University which gave details of students enrolled for Justice or Police Studies. Because Police Department records do not include details of officers studying tertiary courses it was not possible to determine from this source which officers were studying at other institutions. Therefore, the questionnaire contained requests for information about this area of a respondent's affairs.

Initially a determination was made that anyone participating in the survey who was found to be studying at another institution should be included in the student/officer group. To cater for this situation extra names were generated by the random number process and included in the comparison sample to cover the possibility that some respondents initially placed in the non-student group would need to be switched to that for students officers.

Those selected for both groups were shown on a print-out of the seniority list and marked as Group A or Group B in order to differentiate them. Finally, using each officer's regimental number, their departmental location was determined from computer records and a questionnaire was subsequently forwarded to them by internal mail with an addressed envelope for return via the same means.

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INSTRUMENT DEVELOPMENT

The questionnaire was developed after full consideration of the research hypotheses and a review of the literature covering the elements identified as having an influence on the situation. This was augmented by personal knowledge of the police environment and the educational process influencing officers undertaking tertiary courses at Edith Cowan University.

The survey commenced with a series of personal questions on the background of each respondent such as age, sex and rank. The important questions in this section were numbers 6 and 7 concerning the person's educational achievements. These served to differentiate the students and non-students. Other personal information was sought to allow for any further research which this study might suggest.

The other sections of the survey contained the specific questions designed to explore the research hypotheses. The section dealing with Organisational Commitment utilised the standard 15 question instrument (OCQ) devised by Porter et al (1974). Responses were scored by means of a 7 point Likert scale which has been found suitable for such surveys (Foddy, 1993).

PILOT STUDY

It is standard practice in such research to perform two pilot studies in order to assist with correction of any problems or errors in the research instrument (Thomas and Nelson, 1990, pp. 268-269).

A draft questionnaire was prepared and then examined by 4 staff from the Justice Studies Department for obvious grammatical and logical errors. A
refined version was then distributed by hand to 40 people who were divided fairly evenly between student and non-student officers. This contained a section at the end of each group of questions requesting respondents to make any comments which they felt were warranted. A total of 20 persons replied. Of these 6 were students and 14 were not. Due to time constraints no attempt was made to follow upon those who did not respond.

The completed questionnaires were firstly examined for written comments and a number of changes were made to the wordings of various questions. The responses were then analysed by computer using SPSS. This provided results for means and standard deviations for each question, a test of significance for each question between groups and a test of reliability for each group of questions using Cronbach’s Alpha. (Thomas et al, 1990, p.354).

Although this process was based on a relatively small number of responses it provided valuable information. It suggested that the members of each group differed significantly on the majority of questions for all hypotheses except that one dealing with organisational commitment. The points on the Likert scale continuum occupied by the mean responses for each group to various questions were as predicted. For instance, graduates more strongly agreed with the propositions as to the value of education and less strongly agreed that officers can obtain sufficient skills from departmental training.

The reliability test for each group of questions showed that this was low for all groups except for the one dealing with hypothesis 5 in relation to future changes in promotional position. It was noted with interest that the figure for the OCQ was also low. An examination of the wording of those questions highlighted by the reliability analysis was made. This
examination indicated that their wordings had the effect of taking them outside the central concept dealt with by the remainder of the questions in the particular group and appropriate changes were made.

As mentioned above the reliability analysis of the OCQ produced a Cronbach's Alpha of only .22. An examination of the results for each individual question showed that no one item was causing this result. Bearing in mind that this is a standardised instrument which had been used numerous times in the past with high reliability no changes were made. However, because the reliability analysis for the other groups of questions suggested that amendments to certain items would result in an improvement, the results obtained for the OCQ were puzzling.

INSTRUMENT ADMINISTRATION

The finalised version of the questionnaire, together with a cover sheet containing an introduction and assurances concerning voluntariness, confidentiality and security of data obtained, was forwarded to each subject at their place of work on 8th August 1994 (Thomas et al, 1990, p.269). This was accompanied by an addressed envelope for return of completed surveys. The Police Department's internal mailing system was used after obtaining permission.

A total of 301 surveys were distributed. By 22nd August 1994, 150 (50%) had been returned. These were marked off on the listing kept and a reminder was sent via computer Netmail to those who had not replied. This resulted in a further 27 (9%) replies being received. Of the total of 177 replies received 3 were not used due to incomplete responses.
LIMITATIONS

This study is designed to establish whether or not there exist any links between participation in university education by police officers and their perceptions about their suitability for promotion, relative to officers not involved in higher education. As will be seen from the research literature and consideration of the situation there appear to be many variables involved. The present research has only investigated the effects of one area and further work designed to incorporate other factors into the study is likely to provide a more complete analysis of the situation.

Those officers who are attending university may be inherently more ambitious, particularly those who are members of or intending to join the Criminal Investigation Branch as this is viewed by many officers as an elite area. If this is the case then this group's need for promotion may be greater than that of non-student officers. Additionally, there may be an element of self-interest involved in that respondents with degrees may be more likely to agree with the proposition that they alone are suitable for promotion. These factors may require further study.
CHAPTER FOUR: RESEARCH FINDINGS

INTRODUCTION

The results gathered from the completed questionnaires and shown in the Tables require some explanation in relation to how they have been interpreted. A total of 301 questionnaires were distributed and these were divided into two groups. All officers shown on university records as having being enrolled at some time in Justice or Police Studies constituted Group A and the others were designated Group B. The completed questionnaires were analysed and grouped according to the responses to questions 6 and 7 which dealt with the respondents involvement with higher education.

The data from the questionnaires were entered onto disk and analysed. After preliminary examination of the results and further consideration of the purpose of the study a decision was made to limit the study group to those officers who had not yet completed a degree and were still studying for a qualification in either Police or Justice Studies. It was considered that officers currently under the influence of an educational program in a discipline directly applicable to their occupation would be more likely to be affected by the kinds of perceptions upon which the Equity Theory predictions of this study are based and be less likely to be under the influence of unknown and, therefore, uncontrolled factors. The appropriate comparison group was considered to be those officers with no exposure to university education.

As this decision altered the number of subjects in the study group the new sample under examination had to be determined in order to ensure that the
proportion of this group included in the final analysis constituted a representative sample.

As shown in Table 1, responses were received from 97 of the 137 officers in the original Group A. Seventeen of these stated that they had completed their course or stated that they were not, in fact, studying. Both groups were eliminated from the survey. Therefore, the total student officers, as shown in Table 2, available for examination was 120 (that is, 137 less the seventeen noted previously). Of these 120, 76 were included in the analysis. Since this represents 63% of the total population of known students officers this is deemed to be a representative sample. The comparison group was drawn at random from all other police officers in the Western Australian Police Department.

Table 1

*Questionnaire returns*

<table>
<thead>
<tr>
<th></th>
<th>Issued</th>
<th>Completed</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>301</td>
<td>177</td>
<td>59%</td>
</tr>
<tr>
<td>Group A</td>
<td>137</td>
<td>97</td>
<td>71%</td>
</tr>
<tr>
<td>Group B</td>
<td>164</td>
<td>80</td>
<td>49%</td>
</tr>
</tbody>
</table>

Table 2

*Revised Sample*

<table>
<thead>
<tr>
<th></th>
<th>Issued</th>
<th>Completed</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Officers</td>
<td>120</td>
<td>76</td>
<td>63%</td>
</tr>
<tr>
<td>Non-students</td>
<td>164</td>
<td>79</td>
<td>48%</td>
</tr>
</tbody>
</table>
DEMOGRAPHIC DETAILS

The demographic details of the two samples are shown in the following tables. These details were obtained from answers to questions 1 to 8 in the questionnaire. Table 3 shows that the overwhelming majority of respondents were male. Table 4 shows the age distribution of the two groups was similar. The service distribution, Table 5, and the rank distribution, Table 7, showed a similar distribution on these factors. There were proportionally more students drawn from the Criminal Investigation Branch than the non-students, Table 6, which is referred to in the Limitations section.

Table 3

<table>
<thead>
<tr>
<th>Gender</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Female</td>
<td>9 (12%)</td>
<td>6 (8%)</td>
</tr>
<tr>
<td>Males</td>
<td>67 (88%)</td>
<td>73 (92%)</td>
</tr>
</tbody>
</table>

Table 4

<table>
<thead>
<tr>
<th>Age Distribution</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-23</td>
<td>7 (9%)</td>
<td>7 (9%)</td>
</tr>
<tr>
<td>24-28</td>
<td>19 (25%)</td>
<td>23 (29%)</td>
</tr>
<tr>
<td>29-33</td>
<td>19 (25%)</td>
<td>18 (23%)</td>
</tr>
<tr>
<td>34-38</td>
<td>21 (28%)</td>
<td>7 (9%)</td>
</tr>
<tr>
<td>39-43</td>
<td>6 (8%)</td>
<td>16 (20%)</td>
</tr>
<tr>
<td>44-48</td>
<td>4 (5%)</td>
<td>8 (10%)</td>
</tr>
</tbody>
</table>
Table 5

<table>
<thead>
<tr>
<th>Years of Service</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;2</td>
<td>6 (8%)</td>
<td>7 (9%)</td>
</tr>
<tr>
<td>2-5 yrs</td>
<td>12 (16%)</td>
<td>22 (28%)</td>
</tr>
<tr>
<td>6-10 yrs</td>
<td>25 (32%)</td>
<td>17 (21%)</td>
</tr>
<tr>
<td>11-15 yrs</td>
<td>15 (20%)</td>
<td>10 (13%)</td>
</tr>
<tr>
<td>&gt;16 yrs</td>
<td>18 (24%)</td>
<td>23 (29%)</td>
</tr>
</tbody>
</table>

Table 6

<table>
<thead>
<tr>
<th>Branch</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>G/Duties</td>
<td>36 (47%)</td>
<td>49 (62%)</td>
</tr>
<tr>
<td>Traffic</td>
<td>8 (11%)</td>
<td>12 (15%)</td>
</tr>
<tr>
<td>C. I. B.</td>
<td>26 (34%)</td>
<td>13 (16%)</td>
</tr>
<tr>
<td>Other</td>
<td>6 (08%)</td>
<td>5 (07%)</td>
</tr>
</tbody>
</table>

Table 7

<table>
<thead>
<tr>
<th>Rank</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constable</td>
<td>56 (74%)</td>
<td>63 (80%)</td>
</tr>
<tr>
<td>Sgt</td>
<td>20 (26%)</td>
<td>16 (20%)</td>
</tr>
</tbody>
</table>

RELIABILITY ANALYSIS

This procedure, using Cronbach's Alpha, was performed in relation to the individual groups of questions relating to each hypothesis, the total group of
questions selected for use and all selected questions minus those dealing with Organisational Commitment (OCQ). Tables 8 to 13 give the values of Cronbach's Alpha for the questions relating to each hypothesis. Table 14 gives the reliability for all items combined and Table 15 gives the reliability figures with the OCQ omitted.

The analysis for individual groups of questions showed that some of these items did not relate to the construct under examination and they were accordingly deleted from all groups except those under the heading of Organisational Commitment. This procedure enhanced the reliability of each group of questions. The overall reliability for the survey as a whole was acceptable. As will be seen from the figures given, the reliability for the OCQ was 0.2617. According to the analysis this could have been improved by the elimination of the six items contributing to the low score. But, bearing in mind the standard nature of this instrument, it was not feasible to adjust any of the questions.

Table 8

Research Hypothesis One

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9</td>
<td>.7113</td>
</tr>
<tr>
<td>Q10</td>
<td>.5717</td>
</tr>
<tr>
<td>Q13</td>
<td>.7698</td>
</tr>
<tr>
<td>GROUP</td>
<td>.7735</td>
</tr>
</tbody>
</table>
Table 9

Research Hypothesis Two

<table>
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<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q14</td>
<td>.8659</td>
</tr>
<tr>
<td>Q16</td>
<td>.8138</td>
</tr>
<tr>
<td>Q17</td>
<td>.8368</td>
</tr>
<tr>
<td>Q18</td>
<td>.8589</td>
</tr>
<tr>
<td>GROUP</td>
<td>.8781</td>
</tr>
</tbody>
</table>

Table 10

Research Hypothesis Three

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
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</thead>
<tbody>
<tr>
<td>Q20</td>
<td>.3868</td>
</tr>
<tr>
<td>Q21</td>
<td>.1562</td>
</tr>
<tr>
<td>Q22</td>
<td>.5986</td>
</tr>
<tr>
<td>GROUP</td>
<td>.4750</td>
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</table>

Table 11

Research Hypothesis Four

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q24</td>
<td>.1229</td>
</tr>
<tr>
<td>Q25</td>
<td>.1230</td>
</tr>
<tr>
<td>Q26</td>
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<td>Q27</td>
<td>.1288</td>
</tr>
<tr>
<td>Q28</td>
<td>.1458</td>
</tr>
<tr>
<td>Q29</td>
<td>.1023</td>
</tr>
<tr>
<td>Q30</td>
<td>.3590</td>
</tr>
<tr>
<td>Q31</td>
<td>.1039</td>
</tr>
<tr>
<td>Q32</td>
<td>.3892</td>
</tr>
<tr>
<td>Q33</td>
<td>.1873</td>
</tr>
<tr>
<td>Q34</td>
<td>.3861</td>
</tr>
<tr>
<td>Q35</td>
<td>.3515</td>
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<td>Q36</td>
<td>.1798</td>
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<tr>
<td>Q37</td>
<td>.1006</td>
</tr>
<tr>
<td>Q38</td>
<td>.3688</td>
</tr>
<tr>
<td>GROUP</td>
<td>.2617</td>
</tr>
</tbody>
</table>
### Table 12

**Research Hypothesis Five**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q39</td>
<td>.7304</td>
</tr>
<tr>
<td>Q40</td>
<td>.7290</td>
</tr>
<tr>
<td>Q41</td>
<td>.8536</td>
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<td>Q42</td>
<td>.7465</td>
</tr>
<tr>
<td>Q43</td>
<td>.7254</td>
</tr>
<tr>
<td>GROUP</td>
<td>.8012</td>
</tr>
</tbody>
</table>

### Table 13

**Research Hypothesis Six**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q47</td>
<td>N. A. (SINGLE ITEM)</td>
</tr>
</tbody>
</table>

### Table 14

**Reliability for all items combined**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9</td>
<td>.6641</td>
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<tr>
<td>Q10</td>
<td>.6614</td>
</tr>
<tr>
<td>Q13</td>
<td>.6809</td>
</tr>
<tr>
<td>Q14</td>
<td>.6734</td>
</tr>
<tr>
<td>Q16</td>
<td>.6571</td>
</tr>
<tr>
<td>Q17</td>
<td>.6552</td>
</tr>
<tr>
<td>Q18</td>
<td>.6589</td>
</tr>
<tr>
<td>Q20</td>
<td>.6952</td>
</tr>
<tr>
<td>Q21</td>
<td>.6830</td>
</tr>
<tr>
<td>Q22</td>
<td>.6618</td>
</tr>
<tr>
<td>Q24</td>
<td>.6875</td>
</tr>
<tr>
<td>Q25</td>
<td>.6987</td>
</tr>
<tr>
<td>Q26</td>
<td>.7131</td>
</tr>
<tr>
<td>Q27</td>
<td>.7082</td>
</tr>
<tr>
<td>Q28</td>
<td>.7031</td>
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<tr>
<td>Q29</td>
<td>.6944</td>
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<td>Q30</td>
<td>.7070</td>
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<td>Q31</td>
<td>.6993</td>
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</tr>
<tr>
<td>Q9</td>
<td>0.8144</td>
</tr>
<tr>
<td>Q10</td>
<td>0.8115</td>
</tr>
<tr>
<td>Q13</td>
<td>0.8266</td>
</tr>
<tr>
<td>Q14</td>
<td>0.8225</td>
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<tr>
<td>Q16</td>
<td>0.8107</td>
</tr>
<tr>
<td>Q17</td>
<td>0.8080</td>
</tr>
<tr>
<td>Q18</td>
<td>0.8084</td>
</tr>
<tr>
<td>Q20</td>
<td>0.8410</td>
</tr>
<tr>
<td>Q21</td>
<td>0.8327</td>
</tr>
<tr>
<td>Q22</td>
<td>0.8159</td>
</tr>
<tr>
<td>Q39</td>
<td>0.8318</td>
</tr>
<tr>
<td>Q40</td>
<td>0.8335</td>
</tr>
<tr>
<td>Q41</td>
<td>0.8254</td>
</tr>
<tr>
<td>Q42</td>
<td>0.8369</td>
</tr>
<tr>
<td>Q43</td>
<td>0.8312</td>
</tr>
<tr>
<td>Q47</td>
<td>0.8320</td>
</tr>
<tr>
<td>GROUP</td>
<td>0.8336</td>
</tr>
</tbody>
</table>
RESULTS

The research hypotheses were evaluated by performing the following tests:
1. Multi-variate analysis of variance for each group of questions;
2. Univariate tests of significance for each question; and
3. Means and standard deviations for each question within groups for both student and non-student officers.

The above were used to test the Null Hypothesis and the appropriate conclusions were drawn.

RESEARCH HYPOTHESIS ONE (NULL)

There will be no difference in the beliefs of student and non-student officers as to whether or not university education provides important police skills.

Table 16
Multivariate Test of Significance for Hypothesis One

<table>
<thead>
<tr>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>18.45</td>
<td>3.00</td>
<td>154.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

\( (S = 1, M = 1/2 N = 76) \)

This shows that the Null Hypothesis can be rejected and that we can conclude that the two groups are different to a significant degree on this point.
Table 17

Univariate F-tests for questions for Hypothesis One

<table>
<thead>
<tr>
<th>Var</th>
<th>Hypoth SS</th>
<th>Error SS</th>
<th>Hypoth MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q9</td>
<td>110.28</td>
<td>443.67</td>
<td>110.28</td>
<td>2.84</td>
<td>38.78</td>
<td>.000</td>
</tr>
<tr>
<td>Q10</td>
<td>108.61</td>
<td>376.25</td>
<td>108.61</td>
<td>2.412</td>
<td>45.03</td>
<td>.000</td>
</tr>
<tr>
<td>Q13</td>
<td>33.73</td>
<td>289.85</td>
<td>33.73</td>
<td>1.86</td>
<td>18.15</td>
<td>.000</td>
</tr>
</tbody>
</table>

Degrees of Freedom (1,156)

Table 17 shows every question was significant.

Table 18

Means and Standard Deviations for questions in Hypothesis One

<table>
<thead>
<tr>
<th>Var</th>
<th>Students</th>
<th>Non-Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q9</td>
<td>3.26</td>
<td>1.74</td>
</tr>
<tr>
<td>Q10</td>
<td>4.61</td>
<td>1.84</td>
</tr>
<tr>
<td>Q13</td>
<td>5.59</td>
<td>1.73</td>
</tr>
</tbody>
</table>

RESEARCH HYPOTHESIS TWO (NULL)

There will be no difference in the beliefs of student and non-student officers as to whether or not university education should be a pre-requisite for promotion.

Table 19

Multivariate Test of Significance for Hypothesis Two

<table>
<thead>
<tr>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.58351</td>
<td>22.46531</td>
<td>4.00</td>
<td>154.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

(S = 1, M = 1, N = 76)

This shows that the Null Hypothesis can be rejected and that we can
conclude that the two groups are different to a significant degree on this point.

Table 20

Univariate F-tests questions for Hypothesis Two

<table>
<thead>
<tr>
<th>Var</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q14</td>
<td>53.24</td>
<td>516.77</td>
<td>53.24</td>
<td>3.29</td>
<td>16.17</td>
<td>.000</td>
</tr>
<tr>
<td>Q16</td>
<td>126.89</td>
<td>578.88</td>
<td>126.89</td>
<td>3.69</td>
<td>34.41</td>
<td>.000</td>
</tr>
<tr>
<td>Q17</td>
<td>222.66</td>
<td>457.72</td>
<td>222.66</td>
<td>2.92</td>
<td>76.37</td>
<td>.000</td>
</tr>
<tr>
<td>Q18</td>
<td>140.71</td>
<td>450.21</td>
<td>140.71</td>
<td>2.87</td>
<td>49.07</td>
<td>.000</td>
</tr>
</tbody>
</table>

Degrees of Freedom (1,157)

Table 20 shows every question was significant.

Table 21

Means and Standard Deviations for questions in Hypothesis Two

<table>
<thead>
<tr>
<th>VAR</th>
<th>STUDENTS</th>
<th>NON-STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q15</td>
<td>4.43</td>
<td>1.87</td>
</tr>
<tr>
<td>Q16</td>
<td>3.15</td>
<td>1.97</td>
</tr>
<tr>
<td>Q17</td>
<td>3.98</td>
<td>2.04</td>
</tr>
<tr>
<td>Q18</td>
<td>2.64</td>
<td>1.55</td>
</tr>
</tbody>
</table>

RESEARCH HYPOTHESIS THREE (NULL)

There will be no difference in the beliefs of student and non-student officers as to whether or not student officers are more deserving of promotion by virtue of their education.
Table 22

**Multivariate Test of Significance for Hypothesis Three**

<table>
<thead>
<tr>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.50</td>
<td>25.68</td>
<td>3.00</td>
<td>155.00</td>
<td>.000</td>
</tr>
</tbody>
</table>

(S = 1, M = 1/2, N = 76 1/2)

This shows that the Null Hypothesis can be rejected and that we can conclude that the two groups are different to a significant degree on this point.

Table 23

**Univariate F-tests questions for Hypothesis Three**

<table>
<thead>
<tr>
<th>Var</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q20</td>
<td>2.73</td>
<td>332.34</td>
<td>2.73</td>
<td>2.12</td>
<td>1.29</td>
<td>.258</td>
</tr>
<tr>
<td>Q21</td>
<td>8.66</td>
<td>372.52</td>
<td>8.66</td>
<td>2.37</td>
<td>3.65</td>
<td>.058</td>
</tr>
<tr>
<td>Q22</td>
<td>232.16</td>
<td>471.32</td>
<td>232.16</td>
<td>3.00</td>
<td>77.33</td>
<td>.000</td>
</tr>
</tbody>
</table>

Degrees of Freedom (1, 157)

Table 23 shows only question 22 was significant

Table 24

**Means and Standard Deviations for questions in Hypothesis Three**

<table>
<thead>
<tr>
<th>VAR</th>
<th>STUDENTS</th>
<th>NON-STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q20</td>
<td>1.71</td>
<td>1.36</td>
</tr>
<tr>
<td>Q21</td>
<td>1.87</td>
<td>1.39</td>
</tr>
<tr>
<td>Q22</td>
<td>1.93</td>
<td>1.41</td>
</tr>
</tbody>
</table>
RESEARCH HYPOTHESIS FOUR (NULL)

There will be no difference between student and non-student officers as to their level of organisational commitment.

Table 25

Multivariate Test of Significance for Hypothesis Four

<table>
<thead>
<tr>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.15</td>
<td>1.40</td>
<td>15.00</td>
<td>143.00</td>
<td>.153</td>
</tr>
</tbody>
</table>

(S = 1, M = 6 1/2, N = 70 1/2)

This shows that the Null Hypothesis is confirmed and that we can conclude that the two groups are not different in relation to this point.

Table 26

Univariate F-tests questions for Hypothesis Four

<table>
<thead>
<tr>
<th>Var</th>
<th>Hypoth SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q24</td>
<td>2.61</td>
<td>357.67</td>
<td>2.61</td>
<td>2.28</td>
<td>1.14</td>
<td>.287</td>
</tr>
<tr>
<td>Q25</td>
<td>1.16</td>
<td>626.08</td>
<td>1.16</td>
<td>3.99</td>
<td>0.29</td>
<td>.591</td>
</tr>
<tr>
<td>Q26</td>
<td>0.04</td>
<td>499.44</td>
<td>0.04</td>
<td>3.18</td>
<td>0.01</td>
<td>.910</td>
</tr>
<tr>
<td>Q27</td>
<td>2.61</td>
<td>689.21</td>
<td>2.61</td>
<td>4.39</td>
<td>0.59</td>
<td>.441</td>
</tr>
<tr>
<td>Q28</td>
<td>5.08</td>
<td>555.84</td>
<td>5.08</td>
<td>3.54</td>
<td>1.44</td>
<td>.233</td>
</tr>
<tr>
<td>Q29</td>
<td>3.18</td>
<td>476.56</td>
<td>3.18</td>
<td>3.04</td>
<td>1.05</td>
<td>.307</td>
</tr>
<tr>
<td>Q30</td>
<td>1.72</td>
<td>623.90</td>
<td>1.72</td>
<td>3.97</td>
<td>0.43</td>
<td>.512</td>
</tr>
<tr>
<td>Q31</td>
<td>1.42</td>
<td>643.42</td>
<td>1.42</td>
<td>4.09</td>
<td>0.35</td>
<td>.557</td>
</tr>
<tr>
<td>Q32</td>
<td>1.42</td>
<td>593.43</td>
<td>1.42</td>
<td>3.78</td>
<td>0.38</td>
<td>.541</td>
</tr>
<tr>
<td>Q33</td>
<td>1.91</td>
<td>480.52</td>
<td>1.91</td>
<td>3.061</td>
<td>0.62</td>
<td>.431</td>
</tr>
<tr>
<td>Q34</td>
<td>3.99</td>
<td>586.15</td>
<td>3.99</td>
<td>3.73</td>
<td>1.07</td>
<td>.302</td>
</tr>
<tr>
<td>Q35</td>
<td>13.21</td>
<td>369.86</td>
<td>13.21</td>
<td>2.36</td>
<td>5.61</td>
<td>.019</td>
</tr>
<tr>
<td>Q36</td>
<td>0.77</td>
<td>411.16</td>
<td>0.77</td>
<td>2.62</td>
<td>0.29</td>
<td>.588</td>
</tr>
<tr>
<td>Q37</td>
<td>1.09</td>
<td>610.62</td>
<td>1.09</td>
<td>3.89</td>
<td>0.28</td>
<td>.597</td>
</tr>
<tr>
<td>Q38</td>
<td>0.32</td>
<td>310.86</td>
<td>0.312</td>
<td>1.98</td>
<td>0.16</td>
<td>.689</td>
</tr>
</tbody>
</table>

Degrees of Freedom(1, 157)
Table 27
Means and Standard Deviations for questions in Hypothesis Four

<table>
<thead>
<tr>
<th>VAR</th>
<th>STUDENTS</th>
<th>NON STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q24</td>
<td>2.22</td>
<td>1.41</td>
</tr>
<tr>
<td>Q25</td>
<td>3.47</td>
<td>1.96</td>
</tr>
<tr>
<td>Q26</td>
<td>5.48</td>
<td>1.61</td>
</tr>
<tr>
<td>Q27</td>
<td>4.74</td>
<td>2.02</td>
</tr>
<tr>
<td>Q28</td>
<td>3.75</td>
<td>1.84</td>
</tr>
<tr>
<td>Q29</td>
<td>2.36</td>
<td>1.55</td>
</tr>
<tr>
<td>Q30</td>
<td>4.58</td>
<td>2.02</td>
</tr>
<tr>
<td>Q31</td>
<td>3.94</td>
<td>2.08</td>
</tr>
<tr>
<td>Q32</td>
<td>5.06</td>
<td>1.90</td>
</tr>
<tr>
<td>Q33</td>
<td>2.70</td>
<td>1.90</td>
</tr>
<tr>
<td>Q34</td>
<td>4.95</td>
<td>1.78</td>
</tr>
<tr>
<td>Q35</td>
<td>2.54</td>
<td>1.36</td>
</tr>
<tr>
<td>Q36</td>
<td>2.01</td>
<td>1.52</td>
</tr>
<tr>
<td>Q37</td>
<td>3.90</td>
<td>2.06</td>
</tr>
<tr>
<td>Q38</td>
<td>6.06</td>
<td>1.44</td>
</tr>
</tbody>
</table>

RESEARCH HYPOTHESIS FIVE (NULL)

There will be no difference between student and non-student officers in relation to the degree of reduction in organisational commitment likely to be caused by lack of promotion.

Table 28
Multivariate Test of Significance for Hypothesis Five

<table>
<thead>
<tr>
<th>Value</th>
<th>Exact F</th>
<th>Hypoth. DF</th>
<th>Error DF</th>
<th>Sig Of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>.23</td>
<td>7.02</td>
<td>5.00</td>
<td>152.00</td>
<td>.0001</td>
</tr>
</tbody>
</table>

(S = 1, M = 1 1/2, N = 75)

This shows that the Null Hypothesis can be rejected and that we can conclude that the two groups differ to a significant degree on this point.
Table 29

Univariate F-tests questions for Hypothesis Five

<table>
<thead>
<tr>
<th>Var</th>
<th>Hypoth. SS</th>
<th>Error SS</th>
<th>Hypoth. MS</th>
<th>Error MS</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q39</td>
<td>13.12</td>
<td>515.24</td>
<td>13.12</td>
<td>3.30</td>
<td>3.97</td>
<td>.048</td>
</tr>
<tr>
<td>Q40</td>
<td>5.83</td>
<td>563.21</td>
<td>5.83</td>
<td>3.6</td>
<td>1.62</td>
<td>.206</td>
</tr>
<tr>
<td>Q41</td>
<td>67.40</td>
<td>348.67</td>
<td>67.40</td>
<td>2.24</td>
<td>30.16</td>
<td>.000</td>
</tr>
<tr>
<td>Q42</td>
<td>18.06</td>
<td>500.04</td>
<td>18.06</td>
<td>3.21</td>
<td>5.64</td>
<td>.019</td>
</tr>
<tr>
<td>Q43</td>
<td>12.47</td>
<td>555.84</td>
<td>12.47</td>
<td>3.56</td>
<td>3.49</td>
<td>.063</td>
</tr>
</tbody>
</table>

Degrees of Freedom (1, 156)

The above table shows that questions 41, 42 were significant.

Table 30

Means and Standard Deviations for questions in Hypothesis Five

<table>
<thead>
<tr>
<th>VAR</th>
<th>STUDENTS</th>
<th>NON-STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q39</td>
<td>2.97</td>
<td>1.65</td>
</tr>
<tr>
<td>Q40</td>
<td>2.99</td>
<td>1.88</td>
</tr>
<tr>
<td>Q41</td>
<td>1.95</td>
<td>1.28</td>
</tr>
<tr>
<td>Q42</td>
<td>2.88</td>
<td>1.65</td>
</tr>
<tr>
<td>Q43</td>
<td>2.91</td>
<td>1.82</td>
</tr>
</tbody>
</table>

RESEARCH HYPOTHESIS 6 (NULL)

There will be no difference between student and non-student officers in relation to the value placed on positions which use their special skills as compensation for lack of promotion.
Table 31

*F* - Test of Significance for Hypothesis Six

<table>
<thead>
<tr>
<th>Source Of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>SIG OF F</th>
</tr>
</thead>
<tbody>
<tr>
<td>WITHIN CELLS</td>
<td>164.92</td>
<td>157</td>
<td>1.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GROUP</td>
<td>14.45</td>
<td>1</td>
<td>14.45</td>
<td>13.76</td>
<td>.000</td>
</tr>
</tbody>
</table>

This shows that the Null Hypothesis can be rejected and that we can conclude that the two groups differ to a significant degree on this point.

Table 32

*Means and Standard Deviations for question 47*

<table>
<thead>
<tr>
<th>VAR</th>
<th>STUDENTS</th>
<th>NON-STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mn</td>
<td>Std</td>
</tr>
<tr>
<td>Q47</td>
<td>1.64</td>
<td>.96</td>
</tr>
</tbody>
</table>
CHAPTER FOUR: CONCLUSION

This research has been designed to test a series of hypotheses concerning the relationships which may exist between participation by police officers in tertiary education especially designed for their occupation and their perceptions of the influence of such courses upon a number of aspects of their working environment.

RESEARCH HYPOTHESIS ONE

The first hypothesis to be tested was that officers taking a degree in Justice/Police Studies believe a university education provides important police skills.

The literature on higher education for various occupations, including policing, demonstrates that participation in such activities produces greater abilities in thinking and problem solving skills leading to an increased understanding of the general benefits of university education. This situation can be used to predict that members of the Western Australian Police Force taking part in such courses will place greater value on the benefits to be derived than their non-student colleagues.

It was found that student officers slightly agreed that degrees provide required skills whilst non-students slightly disagreed (Q9). They disagreed less strongly than non-student officers with the proposition that graduates make better police officers (Q10) and also that a degree should be a requirement for entry to the Force (Q13). These differences were statistically significant at the 0.05 level and, overall, the MANOVA analysis shows a
significant difference between the two groups.

These results support the prediction that officers exposed to the tertiary education process would consider that education was beneficial for police officers. However, what is not known is the extent to which this is due solely to the experience of university as opposed to some other unmeasured factor.

The extent to which the responses to the question of whether or not possession of a degree should be an entry requirement for the job truly reflect respondents' opinions about the value of tertiary education is open to some speculation as both groups may have an ulterior motive for answering in the negative. The non-student officers may feel threatened by others with such qualifications. Student officers may also have an interest in keeping down the total intake of graduates whilst espousing the view that possession of a degree is vital for promotion thereby enhancing their own prospects of advancement.

RESEARCH HYPOTHESIS TWO

The second hypothesis to be tested was that officers taking degrees in Justice/Police Studies believe a university education should be a prerequisite for promotion.

This hypothesis follows on from the first in that the prediction can be made that officers taking degrees will acquire beliefs about the value of higher education for those seeking managerial positions within the Police Department as well as those performing the basic role of the police constable. This hypothesis is also supported by Equity Theory predictions.
that student officers will view their efforts in gaining their degree in Police/Justice Studies as deserving of promotion.

Examination of the survey results showed that student officers less strongly disagreed than non-students with the proposition that sergeants need degrees to be successful managers (Q14). They agreed slightly that a degree is essential for promotion to commissioned officer level whilst non-students slightly disagreed (Q16). Student officers slightly agreed that preference should be given to graduates when selecting personnel for promotion to sergeant whilst non-students slightly disagreed (Q17). Student officers moderately agreed that degrees give commissioned officers needed skills whilst the non-students slightly disagreed (Q18). All differences were statistically significant at the 0.05 level and, overall, the MANOVA analysis shows a significant difference between the two groups.

These results support the hypothesis that student officers will view tertiary education as being a requirement for promotion to sergeant and commissioned officer levels. They also provide further support for the hypothesis that those with exposure to university education will place a higher premium on its value for police officers than officers with no such experience.

RESEARCH HYPOTHESIS THREE

The third hypothesis to be tested was that officers taking degrees in Justice/Police Studies believe that they are more deserving of promotion by virtue of their education.
This hypothesis is based completely upon Equity Theory predictions that student officers will seek to preserve their input/outcome ratio by demanding promotion as compensation for their efforts in gaining a degree seen to be relevant to their occupation.

In relation to the question concerning intention to apply for promotion both groups showed means between strongly agree and moderately agree (Q20). The differences were not statistically significant. Similarly, both groups thought that promotion was an important measure of success in their jobs with student officers having a mean between strongly and moderately agree and non students a mean between moderately and slightly agree (Q21). Again the differences were not statistically significant.

However, in relation to the proposition that, all else being equal, graduates should receive preference when applying for promotion students had a mean a little above moderately agree whilst non-students had a mean just above slightly disagree (Q22). This difference was statistically significant at the 0.05 level and the MANOVA analysis shows a significant difference between the two groups.

Therefore, one can conclude that members of both groups are equally likely to apply for promotion at some time in the future and be in competition with each other. The clear belief of student officers that their educational attainments should make them the preferred applicant for any position sought provides support for the Equity Theory prediction based upon values which are likely to be placed on various inputs and outputs in any equation formulated. It also points to the possible development of a problem should expectations of promotion not be met.
RESEARCH HYPOTHESIS FOUR

The fourth hypothesis to be tested was that officers taking degrees in Justice/Police Studies have a different level of organisational commitment.

This hypothesis is based upon previous research findings regarding the influence of higher education on organisational commitment namely, that it causes graduates to place a greater emphasis on intrinsic job rewards which, if not met, result in reduced commitment on the part of the more highly educated personnel (Mottaz, 1986).

The instrument, as a whole, is designed to measure reactions to aspects of the work environment such as acceptance of organisational goals, (Q28, Q35), willingness to exert extra effort on behalf of the organisation, (Q24, Q27, Q31), and desire to retain membership of the group (Q27, Q30, Q37). These factors are stated to be the components of organisational commitment.

However, because of the low reliability of this instrument as used in the current research - 0.2617 - it cannot be regarded as giving information about the group from which any firm conclusions can be drawn.

It may be that the low reliability encountered here means that, for this group under their present circumstances, there is more involved than the concepts usually held to be embedded within the questionnaire.

The events and pressures of the past few years involving factors such as the uncertainty surrounding merit-based promotion and a period of almost continual media coverage of the serious shortcomings of the Department
and individual members may have combined to produce an air of uncertainty amongst many police officers. Those who responded to the survey may have been prompted to think very deeply about aspects of their occupation which these particular questions may have raised.

It may be that, for police officers, these aspects are different from those which commonly motivate people in other occupations when responding to the OCQ.

An example will illustrate the possibility. Many officers may still believe that the police force is a worthwhile and important career for them. This is a personal viewpoint and, ordinarily, they would not be required to acknowledge this to others. They may however disclose such a sentiment in an anonymous survey. But if the same officer has come to believe that the general public no longer have a particularly high regard for the police then he is unlikely to "talk up the Department to my friends as a great organisation to work for" (Q25) or be "proud to tell others that I am part of the Police Department" (Q29).

However, it would appear reasonable to accept that a number of the questions in this survey do in fact relate to the construct termed organisational commitment. Analysis of the responses of both groups to individual questions shows that the differences are insignificant in all cases except that of Q35 which deals with attitudes towards departmental policy on employees.

Essentially the two groups are not shown to differ on the construct(s) involved.
Some further research on this aspect of the Western Australian Police environment could prove productive. Perhaps it may prove worthwhile to consider an analysis of the stability of this element. It should be remembered that the work of Savery (1992) on this topic was based upon data gathered during 1988. This date may have significance for members of the Western Australian Police Force as it was the beginning of the period which saw the commencement of discussions about a merit-based promotion system and tertiary courses in Justice Studies.

RESEARCH HYPOTHESIS FIVE

The fifth hypothesis to be tested was that officers taking degrees in Justice/Police Studies experience a greater reduction in organisational commitment if not promoted.

This hypothesis is based upon the literature on Equity Theory and organisational commitment which suggests that officers who expend effort in obtaining degrees will suffer greater reductions in commitment if not promoted than non-student officers.

The characteristics of organisational commitment identified by Porter et al (1974), and used as the basis for their original Organisational Commitment Questionnaire, were: (1) a strong belief in and acceptance of the organisation's goals and values; (2) a willingness to exert considerable effort on behalf of the organisation and (3) a definite desire to maintain organisational membership.

The questions in the current survey intended to examine possible changes in this construct caused by lack of promotion are based upon the wording of
the items in the OCQ. On the basis of the data gathered it would appear that student officers are likely to suffer greater reductions in their level of work effort and desire to remain with the organisation.

In relation to the proposition that not being selected for promotion would weaken the desire to remain with the Department, student officers had a mean score just above slightly agree with non-students having a mean score just below this point (Q39). The differences were significant at the 0.05 level.

When considering whether or not they would seriously consider resigning from the Force, (Q40), the relative means for both groups were as given for Q39. The wording of both questions appears almost the same however, there was no statistically significant difference between the two groups in relation to Q40.

On the question of whether non-promoted graduates would be justified in seeking alternative employment (Q41), student officers had a mean score just above moderately agree with non-students having a mean just below slightly agree. Again the differences were significant at the 0.05 level.

When considering the question of whether non-promotion would lessen the level of work effort student officers had a mean score just above slightly agree whilst non-students scored just below this point (Q42) with the difference being significant.

Finally, in relation to the influence which not being promoted is likely to have on loyalty to the Department student officers had a mean score just above slightly agree with non-students scoring just below this point (Q43).
However, the difference between the two groups was not quite significant (0.063).

Overall, the MANOVA analysis for this group of questions shows a significant difference between the two groups.

These results can be interpreted as supporting the Equity Theory based hypothesis that non-promotion for student officers, who view themselves as having higher inputs to their situation, is likely to result in a greater reduction in commitment if they are not adequately compensated. This result supports the findings of Schwarzwald et al (1992).

RESEARCH HYPOTHESIS SIX

The final hypothesis to be tested is that officers taking degrees in Justice/Police Studies place a higher value on positions which use their skills as compensation for lack of promotion.

The purpose of this set of questions was to test the Equity Theory based hypotheses that student officers who are not promoted may seek to retain a balance in their input/outcome ratio by placing a greater value on positions within the Force which allow them to utilise their special skills and which they perceive as providing recognition for these.

The reliability analysis showed that only Q47 related strongly to this concept and the survey results demonstrated that student officers had a mean score below strongly agree whilst non-students scored below moderately agree. The differences were significant at the 0.05 level.
Again, this result gives weight to the Equity Theory prediction that student officers can be compensated for their perceived greater inputs by the provision of positions which allow use of their special skills.

SUMMARY

On the basis of the literature reviewed for this study it appears clear that where an organisation places its employees under the dual influences of a merit-based promotion system coupled with an increased emphasis upon tertiary education problems can develop concerning their motivation. The results of the current survey of police officers supports this view and lends support to the conclusion that similar problems are likely to develop in this State leading to important implications for the group's efficiency and the welfare of individual employees.

It is also clear that the processes involved in such events are very much inter-related, multi-faceted and complex. The task of making a complete and accurate examination of any such system requires careful consideration and analysis. This analysis would perhaps be more difficult within the context of a police service than most other organisations due to the unique nature of the tasks and circumstances involved. There appears to be a limited amount of data available as to how the two aspects central to this study operate together in a police environment from an Equity Theory perspective.

The present study has not explored in any great depth the reasons why police officers hold certain perceptions about the topics of education and merit-based promotion nor the reasons for their thoughts about the effects of non-promotion. Bearing in mind the work of Schwarzwald et al (1992)
dealing with post-promotion decision feelings of inequity this will require further investigation in the near future before the number of educated officers vying for promotion is sufficient to produce problems.

Notwithstanding the limitations of the present study it appears that there is reason for concern in this regard. Student officers seemed to place a greater value on higher education for both lower ranks and those seeking promotion to sergeant and commissioned officer. They also consider that preference should be given to graduates when selecting for promotion.

Although the results of the section on organisational commitment were equivocal, due to the low reliability of the instrument used, to the extent that some elements of this construct were measured there was no difference found between the two groups. However, graduates appear more likely to suffer lowered levels of commitment if not promoted and to place a greater value on certain positions as compensation.

Higher education for police is set to continue as a feature of their environment as is some form of merit-based promotion. This research points out the need to fully investigate these factors which are likely to have a major impact on the Department. Bearing in mind the fundamental predictions of Equity Theory perhaps graduate officers will need to be shown that success as a police officer requires more than a university degree thus influencing their input/output ratio by cognitively altering the value placed upon their degrees.

Alternatively, their outcomes may have to be raised in order to preserve this ratio.
Mottaz (1986) notes the need for the provision of greater intrinsic rewards such as task autonomy, significance and involvement in order to preserve commitment levels amongst more highly educated employees. Sherman (1979) and Bradley et al (1989) speak of the need to raise the levels of skills amongst all levels in police forces. Some combination of these two elements may well provide a solution to any problems associated with the situation examined by this current research.
REFERENCES


*Academy of Management Review,* 2, 602-612.


*Journal of Applied Psychology,* 73, (4), 606-613.


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I am interested in examining the links which may exist between possession of university qualifications by police officers and their perceptions of the value of such qualifications and their own needs for promotion under the Merit Based System within the Police Department.

In order to study these perceptions I am seeking your assistance in answering the attached questionnaire and returning it to me in the envelope provided. This should take no more than about 30 minutes of your time.

The survey includes the usual questions about your personal particulars as well as a variety of questions on police skills, education and promotion.

Your involvement in this project is entirely voluntary although your assistance will be greatly appreciated.

I am not involved in any kind of selection process within the Police Department and your participation or otherwise will have no influence or bearing on you beyond the general benefit of assisting in finding out a little more about these important aspects of our organisation.

Your individual response sheets will be anonymous other than being number coded to correspond with a list of names to allow me to perform any follow up interviews which may prove helpful to clarify various matters. This list of participants and the completed questionnaires will be kept in a locked cabinet under strict security by Mr Guy Hall at the Department of Justice Studies at Edith Cowan University.

This study has been reviewed by the Ethics Committee at the University. Should you wish to discuss the study with someone not directly involved you may contact Mr Guy Hall on 370 6626

If you require any further information about this survey or your role in it, either before or after the study, please contact Detective Sergeant W (Bill) Boaks on 223 3484.
POLICE PERCEPTIONS OF UNIVERSITY EDUCATION AND PROMOTION

This questionnaire is designed to obtain your views on the place and value of university degrees and aspects of future decisions that may be made under the Merit Based Promotion System.

CONFIDENTIALITY.

Your name is not required. Your responses received will be anonymous and confidential and used solely for university research purposes. Results will be contained in my written thesis which will be available to interested parties from the Police Library.

SCALE.

This questionnaire uses a seven point scale. The possible responses are;

(1) Strongly Agree,
(2) Moderately Agree,
(3) Slightly Agree,
(4) Neither Agree Or Disagree,
(5) Slightly Disagree,
(6) Moderately Disagree.
(7) Strongly Disagree.

In the questionnaire the scale has been abbreviated to:
STA   MA   SLA   N   SLD   MD   STD

Please circle your response to each question.

PERSONAL INFORMATION

This first group of questions is designed to obtain some information about you as a person. Please circle a response for each of these questions.

1. What is your age?

2. What sex are you?
   Male    Female
3. How long have you served in the W.A. Police Force?
Less than 2 years. 2-5 years. 6-10 years.
11-15 years. More than 16 years.

4. To which Branch are you attached?
General Duties. Traffic C.I.B.
Other. __________________________ (Please specify)

5. What rank are you?
Other. __________________________ (Please specify)

6. Have you completed a university qualification?
Yes. No.

7. Are you currently studying for a university qualification?
Yes. No.

8. If you have completed or are studying for a university qualification please nominate your main area of study.
Psychology. Other. __________________________ (Please specify)
PERCEIVED GENERAL BENEFITS TO POLICE OF HIGHER EDUCATION

This group of questions is designed to obtain your views as to whether or not a university education provides any benefits to police officers. Please circle the response which most closely corresponds to your view.

9. University degrees give officers the skills required to perform a wide range of duties within the Department.

10. Graduates make better police officers than non-graduates.

11. University degrees don't help police officers deal with common situations.

12. The skills required to be a police officer could be acquired through departmental training.

13. Possession of a university degree should be a basic requirement for entry to the police force.

PERCEPTIONS OF THE NEED FOR HIGHER EDUCATION FOR THOSE IN MANAGEMENT POSITIONS.

This second group of questions relates to whether or not you think a university education is of value to supervisors in the Police Department and whether or not possession of a degree should be a requirement for promotion to such positions.

14. Sergeants need degrees to be successful managers.
15. Promotion to sergeant only requires the sorts of skills which could be gained through in-service type courses and practical experience.

16. A degree is essential for promotion to commissioned officer level.

17. Preference should be given to graduates when selecting applicants for promotion to sergeant.

18. Degrees provide skills that commissioned officers need to formulate policy on a wide range of issues.

19. The skills required to be a commissioned officer can be developed through experience gained in the lower ranks.

PERCEPTIONS OF PERSONAL NEEDS FOR PROMOTION

This group of questions is intended to gather your opinion about your own wishes for promotion to sergeant and above.

20. I intend to apply for promotion as soon as I am qualified.

21. I think that promotion is an important measure of my success in the Police Force.

22. If I have the same practical training and experience in police work as other officers my educational qualifications should make me the preferred applicant for any promotion.
23. I am content with my present rank in the Force.

**ORGANIZATIONAL COMMITMENT.**

This group of questions will look at your current level of commitment to the Police Department as an organization.

24. I am willing to put in a great deal of effort beyond that normally expected in order to help the Police Department be successful.

25. I talk up the Police Department to my friends as a great organisation to work for.

26. I feel very little loyalty to the Police Department.

27. I would accept almost any type of job assignment in order to keep working for the Police Department.

28. I find that my values and the Police Department's values are very similar.

29. I am proud to tell others that I am part of the Police Department.
30. I could just as well be working for a different organization as long as the type of work was similar.

31. The Police Department really inspires the very best in me in the way of job performance.

32. It would take very little change in my present circumstances to cause me to leave the Police Department.

33. I am extremely glad that I chose the Police Department to work for over others I was considering at the time I joined.

34. There’s not too much to be gained by sticking with the Police Department indefinitely.

35. Often, I find it difficult to agree with the Police Department’s policies on important matters relating to its employees.

36. I really care about the fate of the Police Department.

37. For me this is the best of all possible organizations for which to work.
38. Deciding to work for the Police Department was a definite mistake on my part.

In this series of questions, the assumption is that all other factors about life in the Police Force have remained unchanged but that you have been unsuccessful in applying for promotion. The answer which you select should be on the basis of how you would feel under these circumstances.

39. Because being promoted is such an important aspect of my employment with the Police Force not being selected would seriously weaken my desire to remain with the Department.

40. If I am continually unsuccessful in my applications for promotion I would seriously consider resigning from the Force.

41. If the Police Department does not value university degrees when evaluating applicants for promotion then graduates would be justified in seeking employment with another organisation which could demonstrate an appreciation of such qualifications.

42. If the Police Department does not value me sufficiently to promote me then my level of work effort is likely to decrease.

43. If I am continually unsuccessful in promotion applications my loyalty to the Department will suffer.
ALTERNATIVE AREAS OF WORK WITHIN THE FORCE AS COMPENSATION FOR LACK OF PROMOTION.

This final series of questions looks at how you feel about getting and working at various jobs within the Force at your present level without being promoted.

44. The Police Department has a sufficient range of job types to cater for my preferences.

45. I am confident that I could successfully apply for a different type of job within the Police Department.

46. Being able to do work which I find interesting would lessen the impact of not being promoted.

47. The prospect of having a position within the Police Force which fully uses my qualifications would be an attractive feature of employment with this organisation.

Thank you for spending the time in answering this survey.