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Academic Security Education : The Development of an Industry Based Security Management Curriculum

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Academic Security Education :

**The Development of an Industry
Based Security Management
Curriculum**

by

Layne M. Hesse

**A Thesis Submitted in Partial Fulfillment of the
Requirements for the Award of
Bachelor of Science (Security) Honours**

**At the Faculty of Communications, Health & Science
Edith Cowan University, Mount Lawley**

Principal Supervisor: Associate Professor Clif Smith

Submission Date : 19th November 1999

Abstract

This study examined the education profiles and skills and knowledge required for security managers conducted through an educational needs analysis of the security field. Little information is currently available about security education in Australia and there is no centralised source of information about such education. There is also comparatively little information exchanged across institutions, government and industry.

A survey using the interview method obtained and analysed the opinions and perceptions of security skills and knowledge from the sample population. The aim of this study was to contribute to the security field by exploring and analysing the skills and knowledge required to perform the function of a security manager. There is currently no generic or recognised core security curriculum, as a result institutions of higher education have developed education programs in their own area of expertise and markets.

The study set out to identify the security skills and knowledge and to survey security and non-security personnel's perceptions of skills and knowledge. The study then developed a hierarchy of skills and knowledge in order to formulate a core security curriculum model.

The results of the survey are only representative of the participants from the sample population, and although are not conclusive, the results do provide a foundation for further curriculum development in security education.

The outcomes of this study are hierarchies of security skills and security knowledge, and a model for a core security syllabus. The list of skills and knowledge can be used to measure future requirements of security managers, and the model curricula can be utilised in course development and design for security education.

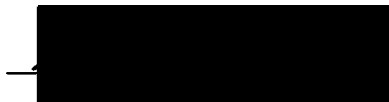
The recommendations resulting from the study include the need for further research in security education and industry needs. The implications for security managers, security industry, and society are that there is now a measure of skills and knowledge that security managers can compare, which can be certified by a university within completion of recognised qualifications.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief,

- i. incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher learning;
- ii. contain any material previously published or written by another person except where due reference is made in the text; or
- iii. contain any defamatory material

Signature

A black rectangular box redacting the signature.

Date

19.11.99

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I would like to acknowledge and express my most sincere appreciation to Associate Professor Clif Smith for providing me with the opportunity and guidance in completing this thesis.

To Mr. Andrew Blades for his patience and assistance I wish to express the same degree of thanks. Our regular meetings and discussions will be missed.

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To my family, the foundation of my being, thank you all, Clive, Sheryl, Shame, Farrah and Tyson, Love you madly.

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CHAPTER 1

INTRODUCTION

Majority of security related programs have been adopted from Justice Studies or Crime Prevention courses, and developed out of the growing demand for private security since the late 1970's with the change in focus of United States of America (US) law enforcement (Cunningham & Taylor, 1985, p.150).

Within the Justice Studies or Crime Prevention paradigm, the security programs are offered as part of degree programs or extensions of masters programs. Academic security courses are located in many US colleges (Cunningham, Strauchs & Van Meter, 1990), while in Australia there are currently eight recognised programs (Tate, 1995, p. 38), of which only one university is offering professional security courses at undergraduate and Masters degrees and Doctor of Philosophy levels.

The importance of academic security programs have been discussed by many authors since the 70's (Fischer & Green, 1992, Cunningham & Taylor, 1990, Bernstein 1994, 1996, Gallati, 1983, Fay, 1993, ASIS Security Journal, 1993;1995). These authors and literature originate from the US, where the discipline of security education has been established for at least three decades,

where as the growth and recognition of academic security programs in Australia has only been established for the last decade. This occurrence does not reflect the rapid growth of the security industry and the demand for security services and products by business, industry and the broader community. The growth and demand for the security industry was described by O'Loughlin (1998, p. 1) in a study of attitudes to biometric access control.

There is considerable amount of conjecture about the placement of security in the academic arena. The placement of security courses in criminal justice and crime prevention programs does not reflect the literature on the importance of academic security courses. While there seems to have been a steady growth in academic security programs over the past few decades (Cunningham et al. 1990, Cunningham & Taylor, 1985, Fischer & Green, 1992), there is still no conformation on a standard academic curricula for professional Security Managers.

The aim of this study is to investigate the set of core security skills and knowledge needed for professional Security Managers and Consultants, in order to formulate an optimal academic security syllabus. The development of a standardised academic security syllabus will enhance the professionalism of security management and contribute towards the discipline of security education. The recognition of security as an academic discipline will only be achieved

through further research, better acceptance by industry and development of comprehensive core syllabus for security education.

Background

There is a drive from industry to enhance the professionalism and image of security practitioners in the community. However, this seems to be pursued within the security industry rather than actively promoting the security discipline through tertiary education and other professional institutions. The majority of academic courses seem to have been developed for further enhancing qualifications and career enhancements of existing practitioners in security or related industries. For example, the University of Western Sydney in 1994 established the Australian Centre for Security Research (ACSR), where the aim of the Centre is to provide opportunities for security practitioners and managers to obtain university qualifications that benefit careers and signal to the community a commitment to minimum entry and educational standards by the industry (Love, 1999, p. 42).

The role of academia is to provide the skills and knowledge needed for a practitioner to be professional in a given discipline, however the role of academia is also to research, question and to teach principles and concepts of the

discipline. Vocational education and training courses are specifically for learning practical skills that are needed for technical levels of the industry.

One argument is that management skills and knowledge required for the function of a security manager lend themselves from the management discipline, and the security knowledge can be easily acquired if the individual's management skills are of a high standard and from a broad range of industries. The role of the university and the purpose of tertiary security programs are to educate professional Security Managers in the increasingly technological and complex environment of security for all aspects of business, crime and societal impacts. Security training in technical and human aspects of the security function is essential for the success of any security management program, together with security education and training the achievement of a professional discipline will be realised.

Currently the security industry has limited standards on education for security management because the knowledge and skills criteria have not been defined or specified. Security practitioners draw from established or recognised fields such as psychology, law enforcement and military education and training, as well as years of experience in the security industry (Fischer & Green, 1992). The American Society for Industrial Security (ASIS) administers the Certified Protection Professional (CPP). The CPP is a professional qualification that has been established for 20 years and is formatted to recognise both years of

experience in security or related industries and levels of education ranging from certificates and diplomas to Bachelors and Masters Degrees. This qualification is not easily obtainable, where persons who meet the criteria in experience and educational background can apply for the qualification by an examination assessment.

The CPP is a professional certification designed to ensure high levels of service of practicing Security Managers. Security industry may recognise the CPP as may other related industries, but it is unlikely that the public will be aware of such a qualification. However, this is not the case for the qualification of Chartered Practicing Accountant (CPA) that is well known throughout all sections of business and community. The community awareness of the CPP will develop over time from the growing demand for security products, services and professionals. However, the growth and development of academic security programs will depend on the promotion and awareness of the security industry. This means providing a course that is attractive to the security industry with continuous support for tertiary programs from industry.

In the Australian context, for the security industry and security management to promote security as a profession (and as a recognised field), security must be accepted on it's own merits as an academic discipline, and not as part of other disciplines such as crime prevention and criminal justice. In order for professionalism and recognition to occur a recognised core 'Syllabus' for security

education needs to be developed, so that all tertiary institutions, industry associations and organisations can input and contribute to the evolving content. This will develop and promote security as a discipline and academic field of study. Collaboration of all stakeholders including universities, industry organisations, Law Enforcement and corporate bodies will be needed to further establish security and security education.

Significance

Professionalism as defined by the Oxford Australian Dictionary (1997, p. 1072) as, “The qualities or typical features of a profession or of professionals esp. competence, skill etc.” Professionalism is about service through competence and skill, and professionalism is achieved by maintaining high levels of service. Two ways of developing competence and skill in high levels of service are training and education. Tertiary education in today’s society is a prerequisite for professional employment. For the security industry, the quest for professionalism has two paths. One path consists of professional bodies and organisations such as ASIS who provide a forum for discussion, training and standards within industry, and the second is the development of academic security programs, and the recognition of security as a discipline in it’s own capacity.

In order to achieve professionalism through education a discipline must establish a body of knowledge. To build on a body of knowledge that reflects the needs of the industry research must be continually pursued through universities and other learned groups. Therefore, academic security programs are needed to develop the security body of knowledge to establish the security as a discipline to aid in the process of achieving professionalism. Thus it would be necessary to establish a standard recognised set of core security skills and knowledge required by Security Managers and Consultants. The collaboration of expert and specialist representatives from industry, business and the Government are required so as to establish the appropriate security content for an industry accepted security management syllabus.

Currently there are no standard or recognised security curricula as universities have developed their own courses with little or no collaboration with other institutions. The significance of this study is the development of an industry recognised security syllabus model, in which security practitioners will have a recognised qualification to enhance their professionalism and establish the future Security Managers with the appropriate security skills and knowledge. The importance of this study is that the discipline of security education in Australia will have a timely and relevant insight into industry needs for security graduates, as well as contribute to the existing body of knowledge.

Past studies in security education syllabus have been US based (ASIS, 1995) where there is a larger number of security practitioners in a larger security industry and population. The importance of this study to the rapidly growing Australian security industry is paramount to the assessment of current academic security programs and the needs of industry. The future status of a professional security industry in Australia is dependent on training and education. Past studies on training have provided insight into the training needs of the security industry (Tate, 1995), while Prenzler (1995) surveyed personnel of Australian security companies. There is only a limited resource of reference to security education in Australia including Wiggan (1993) and Smith (1993, 1995).

The educational needs of the Australian security industry as discussed by Smith (1995), demonstrate there is a need to develop education for the security industry and to document those developments:

“Most modern industries have accepted the need for greater efficiency through a more educated and better trained workforce.”

Purpose

The purpose of this study is to identify the set of core skills and knowledge for Security Management and to develop an industry based academic security management syllabus. A security syllabus model is needed to establish the

foundation of security education that can be developed according to industry specific needs. This study will contribute to the body of knowledge on security education and further develop the profile of security through recognised tertiary education programs tailored to the security industry.

The security industry is growing at an exponential rate (Cunningham, et al.1990) the demand for security educated professionals is estimated to increase and the refinement of such academic security courses through research and consultation will ensure the demand is met.

Research Questions

This study will provide responses to the following questions during the course of the research. These questions have been formulated to fulfill the need to identify and document the core skills and knowledge required to function as a security manager. This need exists because the criteria of knowledge and skills required by Security Managers has not been specified, which is essential to establishing and developing security management as a recognised discipline and the security industry as a recognised profession.

1. What tertiary level course knowledge is required to satisfy the skill set needed for professional Security Managers and Consultants?

2. What are Security Managers and Consultants perspectives on the security skills and knowledge needed to perform the function of a security manager and consultant?
3. What are employers' perspectives on the security skills and knowledge needed to perform the function of a security manager and consultant?

The study will investigate each of these research questions in order to provide a current evaluation of Security Managers and employers perceptions of security education for the development of a standard academic security syllabus model.

Framework for Research

Many trends in Australian business and society mirror those in the U.S. Much of the American research on security education holds true for Australia. However this research must be refined to reflect the context of the Australian security industry. Consequently, an industry needs assessment has been performed to identify the gap between actual and desired levels of a function (Kaufman & English, 1979).

In this case the gap between the actual and desired levels of acceptance and recognition of a core syllabus in security education is being examined, through

the analysis of the required security skills and knowledge and the optimal process of obtaining those skills and knowledge. In order to demonstrate this a conceptual model of the 'Australian Security Industry' has been provided. The model demonstrates the structure of the industry in relation to the required skill levels and proposed education levels.

What is the Security Industry?

The security industry is comprised of all the products and services available in both the private and government sectors, including those who provide, acquire and manage security products and services. This research focuses on Security Managers from organisations, government, and industries that manage the security function.

While Security Managers are not constantly involved in the security industry they do form a body of the security field, while Security Consultants would be directly involved. In order to provide a model of the Australian security industry previous work has been reviewed and adapted, where Smith (1995) provides a hierarchy of the workforce in the security industry according to skill level (Figure 1).

Security Managers
Security Technologists
Security Technicians
Security Guards

Figure 1: Functional structure of the workforce in the security industry

(Smith, 1995, p. 3)

The hierarchy of the security workforce shows the relation of the job function to skill level, which is the premise to this research. The skills and knowledge of Security Managers will be examined, a conceptual framework of the skill levels is presented in this section.

The skill levels of the workforce have been identified by Smith (1995) and need to be placed within the industry framework, Tate (1995) proposed a trial functional model of the security industry that identifies five sectors within the industry and lists the components of each sector.

Tate (1995) has identified the key activities within the various areas of the security industry (Figure 2). 'Control and Develop the Industry' shows the administration and formal activities within the industry. 'Identify Security Threats' shows threat and risk which is applicable to all levels of industry, commerce, Government and society. 'Procure Security Systems' shows the technology design, sales, and installation for security systems, where this activity can range

from high level prison security to low level domestic alarms. 'Management Security Systems' is concerned with the monitoring and management of systems including response and maintenance. 'Deploy Security Systems' shows the consulting area and the various functions involved.

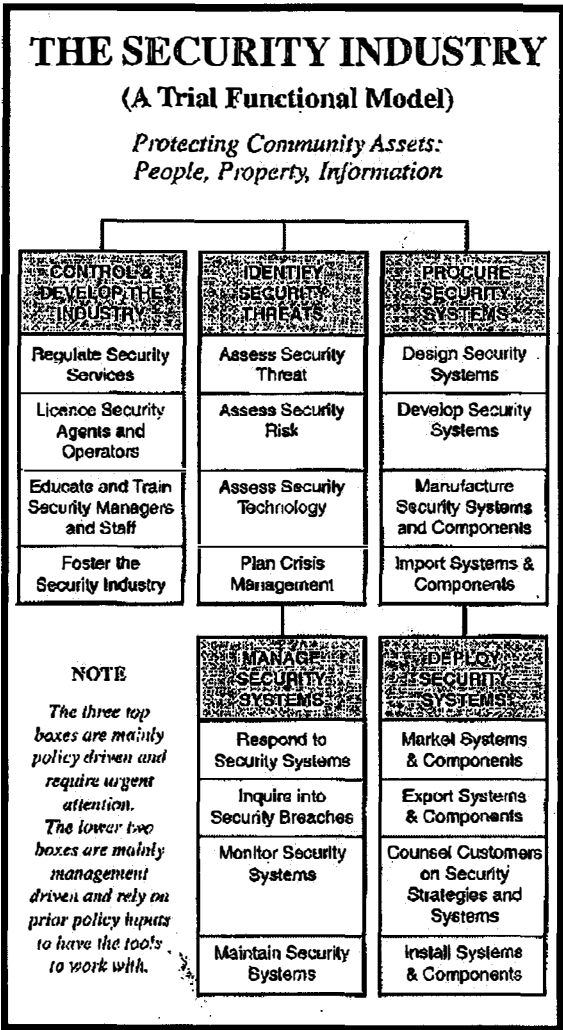


Figure 2: The Security Industry (A Trial Functional Model)

Tate (1995)

By simplifying the industry model, then incorporating the hierarchy of the security workforce, it provides a conceptual model for the ‘Australian Security Industry’ and the levels of qualifications necessary to identify the gap or needs. The industry can be divided into three sectors; ‘Service Providers’, ‘Proprietary Security’, ‘Government Security’ (Figure 3).

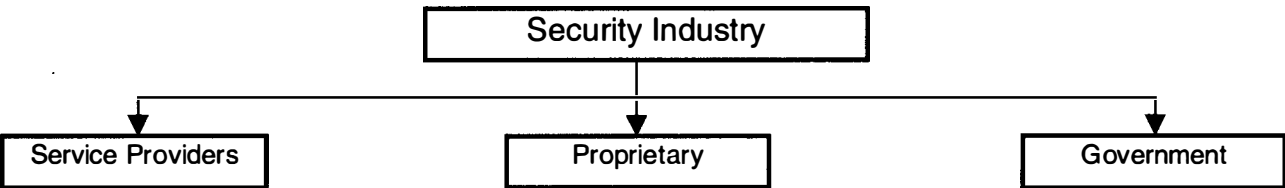


Figure 3: The Australian Security Industry

The ‘Service Provider’ sector consists of all the components that provide security services. Included are consultants, guard services, security equipment installers, products and services, sales and marketing. The ‘Proprietary’ sector consists of ‘in house’ security services, the department within an organisation that is solely employed to perform a security function for that organisation. The ‘Government’ sector consists of ‘in house’ security services employed by government departments (federal, state, local), as well as government agencies responsible for security. This sector could include security operations for police and military, but have not been included to maintain simplicity.

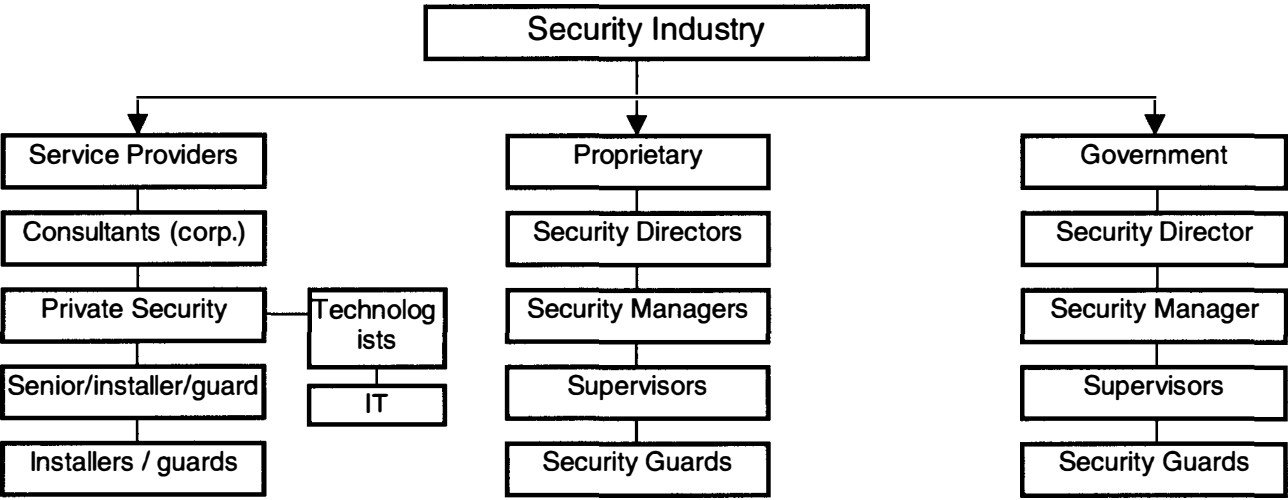


Figure 4: The Australian Security Industry Framework for ‘Skills & Knowledge’ and ‘Education Levels’

In the extended model (Figure 4) each sector of the industry has separate job functions at different levels. The highest level includes that of executives, corporate consultants and directors, whose levels of education and training include multiple or higher postgraduate degrees. The second level of the model includes the security management (managers) whose educational profile may consist of a degree in a relevant field (some post graduate qualifications) or relevant experience in security. The majority of these managers have had many years of experience in security or a related field, the organisation with which they work, including the military and police (Figure 4).

Service Provider Sector

Within the 'Service Provider' sector of the model (Figure 4), the second level deals with 'Private Security', which contains all the services and products available to the private sector. Although it should be noted that some Government departments attain the services of private security, those products and services under defence contract have not been included in this model as private security. According to the model, 'Private Security' is placed at level two, as the executives or managers of the private security organisations are deemed to be at the same level as the Security Managers of proprietary and Government security (Figure 4).

This acknowledgement of the level of skill base assumes that managing a security organisation is at the same level as managing any type of organisation of relative size. Of the security service providers, the management level is unknown although it can be postulated that the levels of qualification of the security organisations' executives is less than that of Government and proprietary security management. Thus it can be postulated that the common criteria for such positions is sufficient years of relevant experience within the security industry or military or police force. It is likely that there may be some personnel within 'Private Security' with degree or higher education qualifications but those are limited.

One group that may have formal tertiary qualifications as a pre-requisite, who are attached to the private security sector (as identified by Smith, 1995) are technologists, the scientists and engineers designing and developing security technology for the industry (Figure 4). It should be noted that these workers could be attached to the Government Sector although they would be part of the defence forces or associated agencies, and are not included in this model. However, law enforcement and defence would be connected to the Government Sector in a holistic model of security.

Computer and information technology (IT) is a discipline that is experiencing even more rapid growth than security. The security of computers, IT systems and information is not only vital but also have a comparable security philosophy. Computer security should be considered as its own discipline and should be placed across all sectors in the model. Currently academics and the IT industry are considering courses at universities for IT security degrees (Irvine, 1997, p.110) which demonstrates the growth and demand for IT educated people. In order to maintain the functionality of the model, computer security has been placed in the service provider sector with technologists. The qualification of individuals within this realm of security should be an undergraduate degree or equivalent (Figure 4).

On the same level as the technologists are the technical consultants. These individuals are usually electrical engineers, who plan and design security

technology. Technologists are people who have the scientific background to develop new technology, to be used in various security applications.

Within the 'Private Security' sector between levels two and three, are products and sales of security equipment including physical, mechanical and electronic. Depending on the high or low end of the market the qualification required for sales would be minimal as, experience, technique and ability are usually the requirement for functional individuals, along with training in sales and customer service. Within the model it is not intended to place products and sales above or below level three, because products and services are decided before installation and maintenance. Therefore there is no direct association between qualification levels of the products and services workforce to the installation and supervisor workforce.

Level three consists of supervisors and senior technicians for the 'Service Provider' sector. The level of qualification within this group mainly consists of on the job training, vocational education and industry training. The level of qualification will depend on the individual, the organisation and the nature of work. For example, a supervisor or senior technician from the government sector may have specialist training due to high security applications whereas a supervisor or technician from either the proprietary or service provider sector would have broader training in the public sector (Figure 4).

Level four in the model represents the 'front line' for security, the security officers or security guards and equipment installers. The qualifications amongst this group are the most lacking (Tate, 1995) as training is restricted to on the job training and short courses. Whilst vocational education and training certificates are available, together with the lack of enforced licensing legislation and the increasing demand for new workers this group is by far the least qualified.

This model (Figure 4) directly shows the skill and required qualification level of each component of all sectors in the security industry. While there are no empirical data, which states the average qualification for level one and two, Tate (1995) compiled statistics of the qualification levels for various job descriptions for levels three and four. Within this model the research is concerned with the educational needs of level one and mainly level two.

Proprietary and Government Sectors

The framework for both the 'Proprietary' and 'Government' sectors, is the same. The highest level is the security director who is responsible for large or multiple portfolios. This position is executive were education and skill levels are similar to corporate consultants (Figure 4). The next level is the Security Manager, whose counterpart in the 'Service Provider' sector are managers of security companies. The next levels, supervisors and guards is the same as the service provider

sector (Figure 4). However the major differences between 'Proprietary' and 'Government' sectors to 'Service Providers' is the education and training levels.

'Government' sector most certainly has higher training levels due to government standards and regulations, while the 'Proprietary' sector may have slightly less, internal training and remuneration is commonly better than 'Service Providers'. The level of education and skill for each component in the model should correspond to the component's position in the model. The gap that needs to be identified is whether the workforce education and skill levels actually match to the desired levels in the model.

According to Sopsic (1979) the security management of the future must possess qualities and characteristics of an upper management executive with the ability to relate to all levels of employees. Almost twenty years on it is likely that the future has already been realised, however security management of today has not quite yet reached that target.

If the Security Manager of the future is going to have to perform at executive level, then the Security Manager needs the same education level as the executives. Therefore if the Security Manager is going to be on par in status, remuneration and priority as other managers, then the Security Manager should have the same education level (Figure 4). Depending on the level of operation the Security Manager's education level should be commensurate to that level,

where a position is of a high level in the organisation then the suitable or higher level of education is required. If the position is low in the organisation the education level should not be higher than that position. Education levels as seen in the Australian Qualification Framework (AQF) should correspond to the level of operation within the organisation.

How does one become a successful manager?

According to Purpura (1989, p. 17) the modern manager requires a complete package of interpersonal and technical skills. The necessary qualities include initiative, intellect, perception, foresight, flexibility and persuasiveness. However, how does one acquire the skills to become a successful manager? Many believe that the answer lies in formal education, while others see experience as the suitable process (academic versus pragmatic). The optimal process is an integration of the theories and practices that complement each other. Theories are at the foundation of many strategies applied in the real world, theories help us comprehend, utilise and evaluate practical experience (Purpura, 1989, p. 17).

CHAPTER 2

LITERATURE REVIEW

Before setting out on research, a review to determine what literature on academic security courses is already available and what assistance it offers toward developing a standardised security syllabus in Australia.

Security Education in the United States

While Australian demands for security, especially technology and guard patrols, seems to be equivalent to the US, the development of security academic programs and research has not matured at the same rate as the US. Not surprisingly, the majority of literature relating to academic security courses is based in the United States of America.

An American ASIS study in 1972 found 50 institutions that offered at least one security course but only a handful that offered Associate Degree programs. By 1976, an inventory by the Private Security Task Force (PSTF) found 22 institutions awarding the Associate Degree and four institutions had established a

Bachelors degree in security. By 1980 there was 150 institutions offering certificates and degrees. Bachelors degree programs had increased to 35, and 10 institutions were offering a Masters program (Cunningham & Taylor, 1985,p. 225). Although the PSTF recommended that the Law Enforcement Assistance Administration (LEAA) sponsor a survey to assess the needs of business and government for tertiary educated security personnel, including skills and knowledge, no such study was ever conducted (Cunningham & Taylor 1985, p. 226). The present study is to investigate similar needs of Australian business and government in the Australian context and judgment requirements. Although no study into the need of Australian business and government for tertiary educated security personnel has ever been conducted.

Professionalism: The Reason for Tertiary Security Education

In 1995 ASIS conducted a survey into academic curricula, however it was motivated by interest in developing a Masters Program for it's members already in the industry to cultivate a higher degree of professionalism, including the development of a code of ethics (Fischer & Green), and industry certifications and standards.

Fischer & Green (1992) discussed the issue of security education under two distinct headings; 'A new professionalism' and the 'Role of Higher Education'.

Astor defines “New professionalism” as (cited in Fischer & Green 1992, p. 20) “the need for a code of ethics and for credentials including education and training, experience and membership in a professional society.” Professional organisations such as ASIS and the Academy of Security Educators and Trainers (ASET) also promote professionalism in the security industry through journals, books, magazines and aid in developing academic security courses in security (Fischer & Green, 1992, p. 20).

The Growth of Security Education

Australian security culture is very different from that of the US and United Kingdom. In the US, security guards often carry firearms, while in Australia only guards protecting cash or valuables are permitted to carry a sidearm. Laws and regulations also differ from one country to another; for example building codes and standards on installation of security equipment. It is therefore, important that Australian security industry and security education begin to conduct empirical research into security academic programs in the Australian context.

Since 1957, there has been demand for improving education in the field of security (Fischer & Green, 1992, p. 44). In the US the LEAA was supportive of law enforcement programs and was instrumental in sponsoring the taskforce in private security. The US Federal Government stopped it's funding as the belief

was, “that private security was concerned with the private sector, then that’s where the funding should come from,” (Cunningham & Taylor, 1985, p. 151).

By 1986, however, the Academy of Security Educators and Trainers (ASET) found that over 60 colleges had dropped their security degree, security programs were housed in inappropriate departments, and that there had been a flight of senior security educators back to industry (Fischer & Green, 1992, p. 46). Fischer and Green (1992) explain that some security programs have prospered while others have failed. They conclude:

“It must be remembered that security education is still a relatively young discipline. The final determinant of program success or failure is the program’s ability to deliver a product that is attractive to the security industry.”

Although some programs were established 20 – 25 years ago, the last fifteen years has seen growth in security education (Fischer & Green, 1992, Cunningham & Taylor, 1985). Leaders in the security field, both academics and practitioners indicate that security should seek recognition as its own distinct area of study, while there are those who believe programs can find autonomy within criminal justice. Regardless, recent surveys indicate that more and more Security Managers are seeking or already hold degrees in the field (Fischer & Green, 1992, p. 55).

The significant increase in academic security programs may be due to three main factors. Firstly, private security is an emerging discipline and is following the traditional path of offering initial courses, developing a minor field of study and finally a degree (Cunningham et al. 1990, p. 150). Secondly, the academic community responded to the phasing out Law Enforcement Education Programs in the US in the early 1980's by focusing on private security courses rather than Police Administration courses. Thirdly, the academic community is reacting to rapid employment growth in private security (Cunningham et al. 1990, p. 150) by developing academic programs to support the emerging industry.

In contrast Chuvala and Fischer (1994, p. 76) reported that there were a substantial decrease in security education programs. It was reported that many programs were not successful. Security education was dominated by police practitioners, while little research was done on effectiveness of programs and little concern was shown for theory in program designs (Chuvala and Fischer, 1994 p. 78).

Academic security education has existed in the U.S. for the last two decades. In Australia the discipline is in the embryonic stage, with limited courses and a lack of uniformity and common educational goals. One known study of the Australian security industry by Tate (1995) of the Australian National Training Authority (ANTA) in 1990 lists the academic security programs and briefly described the status of Australian security education.

In the case study of an emerging industry, the ANTA report included defining the security industry and identifying training needs. Included in the report were occupational profiles, and discussion on the lack of industry classification, as well as the lack of accredited security courses and training programs in various areas. The enormous growth of the security industry does not reflect the small growth and marginal acclaim of the limited number of academic security programs. Tate (1990, p. 38) states:

“The very limited supply of higher education courses for the security industry misrepresents the magnitude, complexity, specialty and confidentiality of the industry.”

Courses are currently listed in course guides and indexes of Australian universities; ECU, QUT, UWS, Griffiths U, RMIT, Bond U (two separate minors), Monash. Of these, the only university to offer full degree and Masters programs is Edith Cowan University, while the remainder offer graduate certificates and diplomas or units to support a minor study to a Justice Studies program (Tate 1995, p. 38).

Recently, ‘Security Australia’ (Security Australia, 1999, p. 40) reviewed four courses of the eight identified in 1995 including; Griffith University, Edith Cowan University, Charles Sturt University and University of Western Sydney. The caption under the title of the article reads, “With suggestions of national based

competency standards in training dominating talk on education in the security industry, it's easy to forget about university courses. Do so at your own peril! Australia's leading security academics argue here, exclusively in Security Australia, why a university security education is worth all it's supposed to be. Read on quickly because places in these courses for the first semester are closing very soon."

The very tone of the caption indicates the skepticism of academic programs by the security industry in an industry-produced publication. It is likely to take many more years and studies such as this research to elevate the industries awareness to academic security programs and the future growth of the security industry and security education. To argue why security education is 'worth all it's it supposed to be' an analysis of current education levels in Security Managers compared to managers of other fields is all that is necessary. However such a survey is not in the scope of this study.

Recent studies published in the ASIS Security Journal have relevance to this study. Heskett (1993, p. 34) researched the appropriate content of a Masters curricula for Security Managers. By method of a literature review, Heskett analysed the limitations of US security education programs, and concluded that a more business orientation towards security management is needed and less criminal justice orientation. Heskett (1993, p. 38) summarises the study by emphasising that the development of a new curricula must have a management

emphasis and that graduate curricula should draw from other disciplines such as psychology, sociology and management.

The study by Heskett (1993) argues for security management and security education as a discipline separate from criminal justice and police studies. Although it does not identify what constitutes a security syllabus, it does suggest the inclusion of management and other disciplines. Fischer and Green (1992, p. 44) point to the number of academic security courses developed over the 25 years as evidence that security constitutes a separate body of knowledge from Justice Studies and Law Enforcement. The first national conference of private security practitioners in 1975 suggested that a sufficient body of knowledge existed to support academic security courses (Cunningham & Taylor, 1985, p. 227).

Security — A Separate Discipline?

The next step for those interested in promoting security education is to consider three questions:

1. What should tertiary security programs teach?
2. How to increase the amount of empirical research data through university research and industry involvement.

3. Whether security studies are substantial enough to constitute their own discipline, separate from criminal justice.

These questions are not in the scope of this study, however they demonstrate the amount of much needed work in this area.

Building a Security Syllabus Model

This study is intended to advance the development of a core security syllabus. It is not enough to develop a graduate program of security management that concentrates on developing business and communication curricula within a security curriculum. There must be a balance of business and communication skills and knowledge, with skills and knowledge of security technology and application as the data analysis will show. A balance can be achieved through cross selection of course minors and electives from other faculties in business and commerce.

Following soon after Heskett (1993, p. 38), another study by Morley, Vogel and Heugal (1993, p. 122), conducted a survey questionnaire of ASIS members in research of a practitioner's perception of delivery methods and core curriculum for higher education in private security. The basis of Morley, et al. (1993) research is indicative of security education research, "It is unknown to what

extent, if any, these programs have based their curricula on any empirical knowledge of the trends and future needs of the security professional.”

This research project is the first study of its kind in the Australian context. From the eight courses identified by Tate (1995, p. 38) none developed courses based on empirical research. The survey by Morley, Vogel and Heugal (1993) is the first of it's kind in security education research. However the results of the survey were not conclusive as Morley, et al. (1993) describes, “that the field of private security is so diversified, and in such a state of flux, that developing a concise core syllabus is fraught with difficulty.”

Unfortunately, the research by Morley, et al. (1993) does not indicate what a core security curriculum could be. Morley, et al. made some suggestion as to what additional research was necessary. The authors' final recommendation was to form a university sponsored commission to examine the status of security education in the US. The purpose of such a commission would be to define academic core curricula, responsive to the existing and projected needs of the security industry. This research project was developed from the recommendation of Morley, et al. There has been no mention of the establishment of such a commission. However, it was reported in 1997 (Security Management, 1997, p. 108) that a Symposium at Webster University on Security education, for the purpose of developing a security curricula. There are still no known developments of a generic accepted security curricula.

While the study sponsored by ASIS was an indication of much needed research by both the security industry and by a university, however no such research published or otherwise is known to have been conducted by an institution of higher learning. Some criticism by Morley, et al. (1993) of the research methodology were not made clear, although an example of the lack of understanding by security practitioners was expressed, "...not all could see the big picture or that some weren't qualified to make curricula decisions."

In 1995, ASIS sponsored a new study, where Nalla, Christian, Morash and Schram (1995, p. 93) discuss curriculum development and the need to redefine concepts of security education. This recent study was the first research of its kind in security education by an established industry and an academic following established at least thirty years ago.

The research by Nalla, et al. (1993) indicates the timely need for such research in Australia. The US has taken almost forty years to prioritise curriculum research for security education. Security education in the Australian context can not wait for answers from the US or UK, but must invoke the industry and institutions to conduct and promote security education research now, while the discipline is in it's infancy and has the potential to evolve into a highly professional field.

Separate from Criminal Justice.

Research by Morley, et al. (1993) and Heskett (1993) suggests that criminal justice is not the proper paradigm for security education. Morley, et al. (1993) established that most respondents to the study expressed interest in courses for English and communication skills in both undergraduate and post graduate education. In regard to research by Morley, et al. comments by Nalla, et al. (1995, p. 94) suggests that security professionals recognise the importance of those areas of study. However, there were no data to suggest participants' perceptions of what topical areas and courses are considered important for students pursuing a degree in a graduate security program.

Nalla, et al. (1995) claims that their research fills the void of security practitioners' views on graduate level curriculum. The methodology used was a questionnaire using a Likert scale. Nalla, et al. (1995, p. 94) explains that the respondents were asked to rank the importance of specific courses for graduate programs of a scale of zero to five. There were 100 courses listed under ten topic areas; this method sets the study within the restrictions given by the listed subjects. The results of this study were far more conclusive, where the list of ranked subjects provided a model for suggested security curricula. However the results of the survey suggested that business and communication skill should be the main emphasis for a graduate curriculum (Nalla, et al. 1995). The focus of the US

discussion and research on security education is on graduate programs, but little is mentioned about course development for undergraduate security programs.

This study has examined both graduate and undergraduate security education. The purpose for doing this is that the skills and knowledge set required to develop a core syllabus for security education needs to start at Bachelor level, so that once the syllabus model is developed the model for graduate level can be established. For future professional Security Managers the majority will complete a Bachelor's degree, so for this reason both levels of education must be examined.

While these studies are relevant to any security education program, the validity to the Australian security industry and education programs is questionable. Trends from the US and UK in security transfer to Australia, as a relatively young security education culture it seems necessary to conduct more recent and valid research into the Australian context and contribute to the empirical data available. The ASIS survey by Nalla, et al. (1995) identified the focus on business and communication topic areas, as this is important in the development of graduates in security, as well as management or commerce graduates. Therefore if you were to assume that in security management these business and communication skills were developed through management courses and units incorporated into the security program, what then would the core security units be?

Not unlike the US, Australian security education programs are likely to be conceived by academics with an interest or background in security, and often carry the characteristics of the principal educator responsible for the security programs inception and development. Some courses are designed in partnership and consultation with industry experts; for example University of Western Sydney in 1994 joined with security industry groups to develop and promote tertiary level security education (Security Australia, 1999, p. 42). The outcome of this method can be seen in the variety of available courses in Australia today. However the impact of these courses on Government, business and the community have not yet been quantified.

Curriculum Design and Development

As part of curriculum design and development the 'syllabus' is a key component, while this research is focused on syllabus development for tertiary level security education, curriculum design and development is a discipline in its own right. To discuss and explain curriculum and syllabus in the scope of this study would be difficult. The complexity of curriculum design and its concepts is representative of the large body of literature on the subject. There are various curriculum models, approaches and designs, all of which are supported by a body of knowledge and empirical research.

Foster (1993) explains a 'strategic approach' which consists of three phases and thirteen stages, while Ornstein and Hunkins (1988) discusses the seven components of design. In developing the curriculum, Oliva (1992) presents four published models, while the University of Nebraska-Lincoln (1992) provides a 10-step plan to course design.

It is perhaps due to the complexity and specialised area of curriculum design that security syllabus and curriculum has never been completely accepted or successful. Evidence by Chuvala and Fischer (1994, p. 76) support the outcome that courses have diminished in number over the last ten years, mainly as a result of poor design.

This study will not attempt to develop an entire security curriculum model, but rather a 'Security Syllabus Model', by investigating two key components of a syllabus, skills and knowledge, as a security curriculum model is too complex.

The Call for Security Curriculum Development

Since 1989 some in the security field have raised the issue of solid, stable, generic, accepted and recognised security curriculum. While some programs flourish others have failed, and in his article 'A Solid Foundation in Academia'

Hertig (1989, p.87) discusses the many issues and solutions to the struggling discipline of security education in the United States of America.

As discussed, complexities and specialisation of syllabus design is one cause of program failure. Eisaiedel (1990, p. 69) called on context experts and course designers to be recruited to design and develop suitable education and training programs, that are accredited so as to maintain uniform standards and credibility. Still by 1994 no solid curricula for undergraduate security programs existed (US) as reported in Security Management (1994, p. 85). The article (Security Management, 1994, p.85) stated that, "The process was long overdue," and "The involvement of syllabus design specialists is the key to this process."

Only in 1997 did there seem to be some progress, as reported in Security Management (1997, p.108) ASIS was to sponsor the 'first-of-it's-kind' symposium on security education. The results of the symposium are unknown to the researcher and no literature became available. The goal of the symposium on security education was to decide, 'what should be included in model graduate and undergraduate curricula' (Security Management, 1997, p. 108).

Again the results of the symposium or any recent literature on the subject of security curriculum development published or otherwise are unavailable, this of course is based on US contexts. However, in Australia the young security discipline has not yet seen the same trends in security education as the US. This

is why it is pertinent now to establish generic recognised security curricula to ensure high levels of uniformity, standards and credibility.

One key factor identified in research by Chuvala and Fischer (1994, p. 76) is that those programs which were successful and maintained high standards were those that used 'advisory boards' or 'consultative committees'. When calling on syllabus or curriculum designers and developers, the use of 'advisory boards or committees' is strongly recommended.

Generic skills, attitudes and knowledge from university education

A university can ensure, and reasonably be asked to certify, that its graduates have mastered certain bodies of knowledge, that they have acquired certain generic intellectual skills and attitudes, and that where appropriate, they satisfy standards of entry to the profession (Clanchy & Ballard, 1995). Within the security industry only service providers now have standards of entry (AQF Certificate I - V), while all other areas of the security field have no standards of entry. Experience and perhaps at some levels tertiary qualifications are prerequisites for security management positions. A formal security qualification is providing a standard of entry to the security field (at management level), however that standard has not yet been acknowledged.

In response to industry the challenge for universities is to find a way of clarifying for stakeholders (community, employers, and students) their skills and attitudes of their graduates (Clanchy & Ballard, 1995, p. 159). By identifying the required skills and knowledge of a Security Manager, the university can develop and provide students with the relevant core skills and knowledge students will require to enter the security field (academic approach) with a standard of entry otherwise only obtainable through years of practical experience or relevant training (pragmatic approach).

However, what then is distinctive about the academic process in which skills and knowledge are obtained? And what then are the types and levels of thinking that higher education requires? What type of communication and information management does the context of higher education require?

To answer these questions, Clanchy & Ballard (1995, p. 160) give two principles:

“Generic skills (and attitudes), while by definition at work across a broad range of university education, can only be developed within specific contexts of knowledge”.

“The contexts (the disciplinary structure of knowledge) within which generic skills (and attitudes) are being developed determine the form which these skills (and attitude) will assume in any particular instance”.

Therefore, through the study of a body of knowledge (a discipline) the generic skills of a university education would be acquired. What then are the distinctive generic skills that categorise the university education? According to Clanchy & Ballard (1995, p. 160) the generic skills are grouped into three areas; *thinking*, *research* and *communication*. Without going into detail of each area a description of each is given.

Thinking - University education seeks to develop analytical thinking in the students. Analytical thinking includes concepts, laws, models, theories, facts, data, or any combinations. The purpose of which can be for problem solving, decision making, evaluation and policy-making.

Research - McPeck (cited in Clanchy & Ballard, 1995, p. 162) states, "Analytical thinking cannot proceed independently of a subject matter or a knowledge base". Analytical thinking is the means by which knowledge and information are identified, selected and evaluated.

Communication (oral and written) – Effective communication of the products of thinking and research involve at the very least, a selection of the appropriate medium and knowledge of the conventions appropriate to the medium selected.

It is the responsibility of the discipline and the academic department to identify the generic skills relevant to the discipline and to encourage the development of

these skills in students (thinking, research, and communication). This study has identified the specific security skills and knowledge required to perform the function of a security manager, together with the generic skills of a university education, the graduate of a security degree would have above average standards of entry to the security industry, only lacking in practical experience.

According to the report 'Graduates Work: Organisational Change and Studies' cited in (Warwick, 1997, p. 49), a university education is still regarded as beneficial for the individual and as something adds value to organisations. Degree courses can equip graduates with the critical outlook that is vital for economic regeneration both in companies and nationally.

It has been identified that team working, interpersonal skills and communication are the three central interactive attributes that enable graduates to fit in with organisational culture, to exert influence, to develop ideas in an evolving situation (Warwick, 1997, p. 49). Until now the security industry has not had the influx of security graduates, hence the industry, as well as graduates will need to overcome this transitional period.

As companies become increasingly global it is essential that professionals are adept at negotiating and developing strategic alliances on a global basis (Koumantzelis, 1997, p. 44). Globalisation is an issue that is effecting managers from all countries and levels of operation, Security Managers should not be an

exception. As organisations increase in global activity the security manager will discover a complex range of new issues where re-education may be required. Education and training as discussed by Finegold (1994) for all managers in the global realm is vital, therefore tertiary education for Security Managers should be just as important.

When hiring professional staff, recruiters want to see resumes with real-world experience. Universities supply this exposure through internship. However, rapid changing pace of industry makes it necessary for education programs to constantly update courses and teaching methods. As commerce and industry lead into the 21st century, and towards a new business frontier, it is important to keep in mind that one's education is never completed. By taking advantage of the educational opportunities that surround them, whether it is on the job or in the classroom, will professionals meet the challenges that face them? (Koumantzelis, 1997, p. 44)

Yorke (1999, p. 277) raises the question: what function does the first degree serve in the context of life long learning? In earlier times many took the view that a first degree was a sufficient basis for a life time career. The accelerating pace of knowledge development has undermined this conception, and increasing attention is now being given to the provision of higher degree programs and other opportunities for professional development.

A first degree should, if they have not already acquired it, develop in students the ability to learn how to learn, as well as enhance their subject specific expertise and other relevant skills. The professional accreditation of some first-degree programs is seen by some as a *sin qua non* (Yorke, 1999, p. 277).

Economic Benefits of Higher Education

Going to university was once strictly for the elite, however now higher education has become a mass-market business. Across 17 OECD countries, the average proportion of those aged 18-21 in higher education has risen from 14.4% in 1985 to 22.4% in 1995 (The economist, 1997, p. 72).

Economists take two contrasting views of higher education. Firstly, they regard higher education as an intellectual sieve, designed merely to identify the brightest future employees, rather than to equip them with productive skills. Secondly, economists regard education as an investment which builds 'human capital', making individuals more productive and thus benefiting society as a whole (and organisations) (The Economist, 1997, p. 72).

It has been said that few students leave higher education without learning something, and what they learn probably makes them better and more skillful workers. Graduates benefit from higher earnings and better employment

prospects, in return for the costs of education and loss of income. Society also benefits from graduate's higher earnings; this results in higher tax revenues and lower payments for unemployment benefits and income support. However, the gains are much smaller than those to individual students (The Economists, 1997, p. 72).

The justification of society's investment into higher education is faster economic growth. Recent economic research has supported the existence of a link by emphasising the role of human capital in promoting growth and innovation (The Economist, 1997, p. 72). The idea of higher education providing economic returns is supported by Yorke (1999, p. 277) who says, "Governments have increasingly come to recognise a link between their education system and national economic performance."

Australian Qualification Framework

To equate Figure 4 in Chapter One 'Security Industry Model' with the skill and knowledge level and qualification levels, there must be an understanding of the Australian Qualification Framework (AQF). The AQF was introduced in 1995 and provides a flexible framework for all qualification in post compulsory education and training. The national framework recognises that the schools sector, vocational education and training sector and higher education sector each have

different industry and institutional linkages (AQF, 1998, p. 1). The AQF connects all three sectors incorporating qualification levels, titles and guidelines.

A qualification as defined by AQF (1998) is, "Formal certification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional industry or community needs". The learning outcomes for each sector are different, in the schooling sector learning outcomes are a general education at the completion of secondary schooling.

In the vocational education and training sectors learning outcomes lead to achievement of competencies (AQF, 1998). The higher education sector has derived their qualification from the degrees of older universities modeled on the British, German and US universities. Today's universities seek to prepare graduates to operate in any sphere at a professional level consistent with international best practice in ways that consist of the highest ethical standards (AQF, 1998).

When describing competency and qualification there must be a clear definition of what is competency. The AQF (1998) defines competency as, "The possession and application of both knowledge and skills to defined standards, expressed as outcomes that comprehend to relevant workplace requirements and other vocational needs". Academic security courses provide graduates with the

knowledge and skills for entry into the management level of the security industry, to what level of competency depends on the individual, the amount of time in the field and 'on the job training'.

METHODOLOGY LITERATURE

The study focused on collecting and analysing people's opinions and perceptions of skills and knowledge required for Security Managers and the development of a core security syllabus. To achieve this outcome, the method chosen must be suitable for the accurate and relevant description of opinions and perceptions. Qualitative research methodology was considered the most suitable for this study, because qualitative research is descriptive and the opinions and perceptions of participants are described.

An extensive review of research methodologies was undertaken to support and justify the research project. The three main topics for consideration were *sampling, research design and analysis of qualitative data*.

Sampling

The target population of interest was all Security Managers, their employers and Consultants within the proximity to the researcher. Selected organisations and individuals in Perth, Western Australia were contacted and invited to participate in the study. The form of sampling is an example of 'Purposeful Sampling' as Wiersma (1995, p. 214) explains, where the participants are selected because of their characteristics relative to the phenomenon being studied. Participants are not selected randomly, but by identified criteria and availability. For the sake of this study those selected were large well-known organisations or individuals that were identified through links in industry. The availability or interest of those selected determined their involvement.

From the target population those who responded and agreed to participate in the project were included in the sample population. The method of sampling is crucial to the validity of the data and hence the findings of the study. The sample must also be representative as it is important that the characteristics of the sample are similar to the wider population (Lewis, 1979 p. 180). Borders and Abbott (1988, p. 185), state that "A representative sample closely matches the characteristics of the population" and that regardless of the technique used in acquiring the sample, the sample should be representative of the population of interest.

Research Design

Within the qualitative paradigm, the type of research to be used is both descriptive and evaluative. Qualitative research is that which does not produce findings by means of statistical procedure or other means of quantification (Strauss & Corbin, 1990, p. 17). Quantified data can be used in qualitative research, but the qualitative emphasis on the analysis determines which paradigm is being used. This study is a descriptive approach with the opinions of the participants providing the primary data to be evaluated.

This research is a survey, which is the most widely used research type in sociological research (Wiersma, 1995, p. 169), and while this research is not sociological, it is concerned with the need and type of education required for a specific field of employment. Epistemology is a branch of philosophy that investigates the origins, methods and limits of human knowledge. The epistemology of qualitative research includes the basic ideas of how research is conducted, where these include techniques and procedures. However, qualitative research is more than just technique or procedure, as Wiersma (1995, p. 212) explains:

“Phenomena should be viewed holistically and complex phenomena can not be reduced to a few factors or partitioned into independent parts.”

“It is the perception of those being studied that are important and to the extent possible these perceptions are to be captured in order to obtain an accurate measure of reality.”

These two points describe the security industry and the educational needs as the phenomenon being studied and the participants whose perceptions describe the phenomenon in order to accurately measure reality. Contemporary, real life phenomenon and the reasons that shape them are best studied using qualitative methods (Schatzman & Strauss (1973) cited in Drew, Hardman, Hart, 1996, p. 163). The study of security and non-security practitioners' perceptions and opinions were best studied using qualitative methods with interviews to compile/collect data from various sources that have extensive or some contact with the security function. Drew et al (1996) states that “Rich and supportive data from different sources will improve the researchers chance to create a valid description and complete a valid analysis.”

The data were obtained by the method of survey research, where “Survey research involves asking questions of a sample of subjects who are presumably representative of the group being studied” (Drew, Hardman, Hart 1996, p. 38). Drew et al. (1996) state that surveys are used to measure attitude, opinions and achievements. This study is a description and evaluation of generalist, specialist and expert opinions, so therefore it is reasonable to have utilised the survey method. The survey design of investigation has adapted a 'cross sectional

design', which is a survey that involves data collection at one point in time from a sample, or from more than one sample representing two or more populations (Wiersma, 1995, p. 175).

The technique used for the chosen survey was the interview technique where Drew et al. (1996) indicates that the interview is one of the most commonly used methods for gathering data. The interview can take the form ranging from highly structured to completely open-ended. For the purpose of this study, a structured in-depth interview was applied. The interview process is highly interactive and beneficial as it is flexible and personal as information can be provided in great depth (Drew et al. 1996, p. 174).

There are advantages and disadvantages of the interview technique as Wiersma (1995, p. 200) states, "Although the interview is well suited to probing the feelings and perceptions of individuals, the items of the interview itself do not ensure accurate measurement of those feeling". As a data gathering technique, interviewing is flexible and personal which can provide information that may not have been presented, however it can be expensive and time consuming (Drew, et al. 1996, p. 174).

Interviews facilitate for open dialogue where respondents can add insight and perspectives not yet considered by the researcher. Also the personal nature of interviews can provide for personal perspectives unique to the individual being

interviewed. The personal nature can aid in establishing a rapport, which can allow for a follow-up or further contact during analysis so as to clarify an issue (Drew et al, 1996, p. 175).

Using this technique the interviewer is the instrument for recording and, to an extent, eliciting responses. Recording of responses can be achieved by taking notes or recording audio. While recording responses by hand the researcher is at risk of bias to record selected responses. Audio records are time consuming and expensive, and can create distrust or tension, especially in regards to sensitive questions. The technique adopted for the study combined the note taking and questionnaire format, as the question schedule sent to participants allowed responses. Those who chose to complete the question schedule discussed their responses and some additional information during the interview.

Qualitative research usually commences without any preconceived theories or hypotheses as data collection uses inductive inquiry, however all researchers are influenced by their own backgrounds, experiences, research questions and available resources about the research problem (Wiersma, 1995, p. 214). The theoretical framework for this study is based on the common opinion and perceptions of security skills and knowledge.

Analysis of Qualitative Research

Qualitative researchers seek patterns and themes in social life while trying not to portray unique circumstances as though they represent society and human behaviour in general (Drew, Hardman, Hart, 1996, p. 411). This study has identified patterns and themes that represent the security field and behaviour of both non-security people and security practitioners. The analysis of qualitative data is a process of successive approximations towards an accurate description and interpretation of the phenomenon (Wiersma, 1995, p. 216). This study has described the educational needs of the security field (industry) and provided an interpretation of the education levels structure and perceptions of the security industry, management and practitioners.

When reporting research, which is descriptive in nature, there is usually minimal technical language, with the emphasis being on describing the phenomenon in its context and by that basis interpreting the data. The large quantities of descriptive data from field notes and interviews need to be organised in order to reduce data, where this process is termed coding (Wiersma, 1995, p. 216).

Coding

Coding and counting allows researchers to explore, explain, describe and illustrate qualitative data and the findings. Coding provides an important audit trail of the logic employed by the researcher when analysing the data (Drew, Hardman, Hart, 1996, p. 421). The researcher searches for patterns of thinking or common behaviour, words and phrases and regular events, where the words describing such phenomenon became the coding categories including, categories that are subdivided (Wiersma, 199, p. 217).

The categories in this research have been identified and defined according to the sample population and participant's profiles, questions and skills and knowledge of security. Wiersma (1995, p. 217) states, "any number of possible codes may be used, and the coding categories became specific to the research study. The research problem and the purpose of the research influence the particular coding systems." Wiersma (1995) explains that when perceptions of the subjects about how they perceive the situation is an important factor, coding systems should capture these perceptions. "In fact the perceptions of the subjects about the phenomenon under study is a general code" (Wiersma, 1995, p. 217). Each question in the study will be coded by the perceptions of the participants.

Wiersma (1995) identifies a general code as the subject's perception of people or things. Other codes, which focus on sequence of events, are process codes.

For this study the codes are, perceptions of people such as Security Managers, students and graduates, while perception of things include skills and knowledge, and the perceptions of processes include education, training and career pathways. These perceptions are the codes that will categorise the data and analysis. Miles & Huberman, Patton (cited in Drew, Hardman, Hart 1996, p. 422) asserts:

“A qualitative researcher must be able to show how conclusions are drawn from the data as part of the analytical process in order for the consumers of the research to have confidence in the findings.”

In order to give the reader confidence in the study's findings, the analytical process used each question as the unit of analysis. The analytical codes developed represent central concepts emerging from the data. These concepts allowed for counting of frequency with which the concepts appear, developing a sense of integrity and distribution of concepts.

Qualitative analysis can be divided into two types: inductive and deductive. Inductive analysis allows concepts, patterns and themes to emerge from the interactive topic employed by the researcher. While deductive analysis can take many forms which uses systemically collected data using naturalistic methods and open techniques or a theory may drive the original research including a

conceptual framework proposing relationships and predicting outcomes (Drew, Hardman, Hart, 1996, p. 425).

By describing the security field educational needs, education levels and pathways, as a phenomenon being studied, phenomenological analytic techniques should be discussed. Educational or social science research methodologies are the most suitable to describe the research being conducted, therefore the same techniques can be used to explain this research methodology.

The two most common forms of phenomenological analytical techniques in education and social science are *thick description* and *criticism*. Through the use of prose the researcher places the reader personally and vividly in the setting observed by the researcher, while criticism openly adds preferences, likes and dislikes to the process (Drew, Hardman, Hart, 1996, p. 426). Both these styles require the same writing skills, however the differences as explained by Drew et al. (1996) as *thick description* provides an accurate and vivid image of the setting and conveys the researcher's point of view compared to *criticism* which criticises as well as expresses a point of view.

Qualitative research is researcher dependent, as Wiersma (1995, p. 218) states, "for data collection the researcher is the instrument. This means that as data collection is ongoing and during the entire research process for that matter, the

researcher makes decisions about what data to collect whom to interview and so on". As interviews and observations are less structured and standardised than quantitative research, so the researcher's perspectives are highly influential in qualitative research. Wiersma (1995, p. 219) explains that there are many types of qualitative research which can be approached from two perspectives. One perspective is called the *funnel approach* and the other *modified analytic induction*.

The *funnel approach* begins with general research questions to begin the study, then when initial data collected more focused data collection, analysis and interpretation follow in a process which conclusions are concentrated on a specific component. The *modified analytical induction approach* begins with a specific research problem and questions, then attempts to cover all areas of the phenomenon under study to arrive at a comprehensive, descriptive model (Wiersma, 1995, p. 219).

Wiersma (1995, p. 222) explains that, "A well organised, complete persuasive presentation of procedures and results enhances external reliability. The reader should acquire an adequate understanding of the research so that a judgment about its replicability within the limits of the natural context." Qualitative research must have the ability to convey meaning and expand understanding while contributing to theory, development and knowledge. The reader must be convinced with both methods and procedures, the findings, the analysis and the

conclusion, as well as reliable and valid information about the subject under study (Drew, Hardman, Hart 1996, p. 428).

This Chapter has reviewed and discussed the available literature on the relevant areas to this study. Past research in this area has been analysed, as well as supporting literature on the research methodologies. The following chapter will discuss the *Study Procedures*.

CHAPTER 3

THE STUDY

To thoroughly examine the security industry educational needs one would be required to conduct a longitudinal study of job and qualification requirements, education levels, feasibility of education and career pathways. An industry educational needs assessment involving industry clients, government local and federal, legislative bodies, industry bodies, education and training institutions and security workforce representatives at all levels is required.

This study aimed to identify the set of security skills and knowledge required for a Security Manager to effectively function at the professional level in the security industry. The source of this set of skills and knowledge was drawn from Security Managers, their employers and Security Consultants in order to examine the broader industry perception of security skills and knowledge needed for tertiary level education. It is the opinion and perception of the participants that provide the information to develop the data set.

The research problem and question determine the methodology, as the chosen methodology must define the security skills and knowledge for security management and the security industry in order to identify the educational needs.

The stages of the study included identifying the target population and contacting possible participants, conducting the interview, compiling the data, analysing the data, developing a hierarchy of skills and knowledge, and designing a security syllabus model.

In order to collect a broad range of personal opinions and perceptions of security skills and knowledge, Security Consultants, Security Managers and Non-Security Managers were contacted to participate. Analysis of opinion provides for insight into the different levels and environments that Security Managers operate, in order to develop a generic and applicable security syllabus framework. Currently there is no generic accepted or recognised security curricula model. It is thought that this methodology ensured all research questions were answered and that the study outcomes were valid and comprehensive.

The researcher cannot claim to have used a specific type of analysis, however the deductive analysis paradigm is more prevalent. Based on the views and background of the researcher and the coding and counting method used, this research could be a deductive analysis in the form of an 'education needs analysis'.

This study is an 'education needs analysis', where the qualitative research paradigm best describes the research methodology. Therefore qualitative forms can best describe the analysis of the research. It was not intended that the

research be analysed in either 'thick description' or 'criticism', however it can be postulated that both forms were employed.

This study began with the initial question as to 'What tertiary level course knowledge is required to satisfy the skill set needed for professional Security Managers and consultants?' and 'What are perspectives on the security skills and knowledge needed to perform the function of a security manager and consultant?'

By investigating these questions the research was lead by the framework that the security skills and knowledge are applied, thus covering all areas of the phenomenon. The result was a descriptive conceptual model of the skill and education levels and the security field, and a hierarchy of security skills and knowledge. The main objective of the research was to develop a standard security syllabus model, and the final result culminated the analysed data and the researcher's perspectives. The modified analytical induction approach, as explained by Wiersma, (1995, p. 219) best describes the study and the processes involved.

This study has described the perceptions and opinions of the sample population by developing hierarchy of skills and knowledge and proposing a model for security syllabus. Whilst the theory was not proven or disproved, the opinion of the researcher has been documented. The knowledge of the mechanisms and

components of the security field’s education needs levels and framework has been documented with explanation, analysis ‘ and criticism. The research methods, analysis and report are confidently presented as reliable and valid, adding to the limited body of knowledge in the Australia context of security education.

Study Procedure

The procedure for the study consisted of 6 stages, commencing at the Development stage and progressing to a Conclusion. Each stage is discussed below with details of the steps involved. Figure 5 shows the six stages of the research procedure.

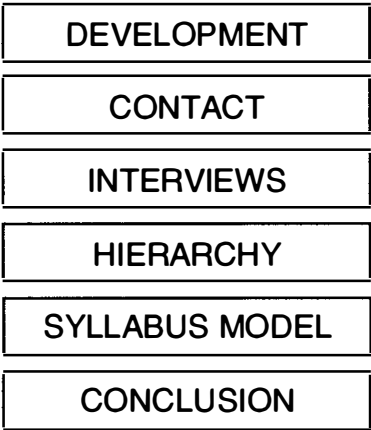


Figure 5: Study Procedure

Stage 1: Development

Stage 1 sought to develop the instrument that would be used to measure and describe opinions and perceptions of security skills and knowledge required for Security Managers and academic qualifications. Once a question schedule was designed the instrument was tested in a pilot study. The results and outcomes of the pilot study enabled the researcher to refine the instrument to be used in the survey. Figure 6 shows a conceptual model of stage 1 and the steps involved. (Appendices A & B)

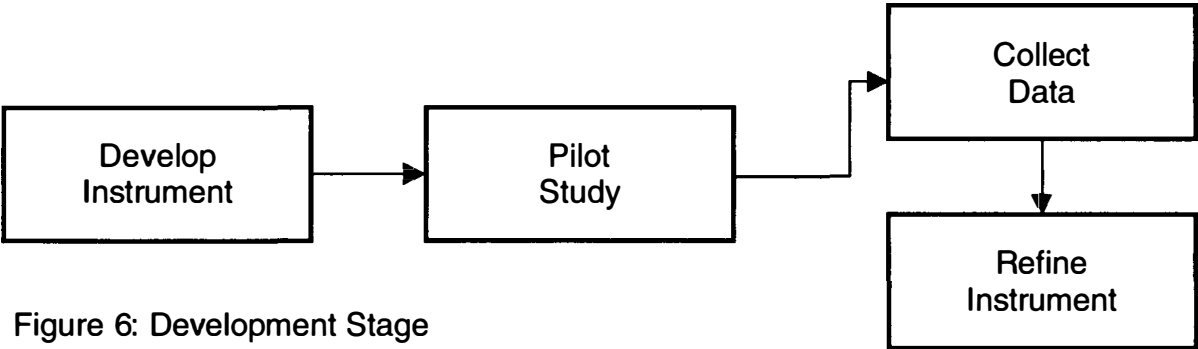


Figure 6: Development Stage

Stage 2: Contacting target population

Stage 2 was primarily focused on contacting and confirming participants from the target population to form the sample population. The initial point of contact was a mail drop followed by telephone calls. First the target population was formed by a list of security practitioners from the West Australian (WA) ASIS chapter. A

second list of Security Managers was compiled by telephoning various organisations, which were mainly large well-known companies.

From the two lists a selection of suitable participants were identified for the mail drop, which contained a covering letter from ASIS WA and a letter from the researcher including two copies of the question schedule. It was intended that the Security Manager would involve the Non-Security Manager or his/her employer, as instructed by the letter, in order to enlist equal numbers of Security and Non-Security Managers.

Following the mailing of the question schedule the target population were contacted by telephone to confirm interest and participation. During Stage 2 there were only two participants that initiated the first dialogue and arranged the first interviews, the remainder required one or two phone calls for confirmation of participation and interview schedules.

During Stage 2, a few interviews were conducted while further telephone contacting was required until a sufficient amount of interviews were scheduled. During Stage 2 some data were collected from interviews, while the majority of the target population required telephone calls. Figure 7 shows the steps involved in Stage 2.

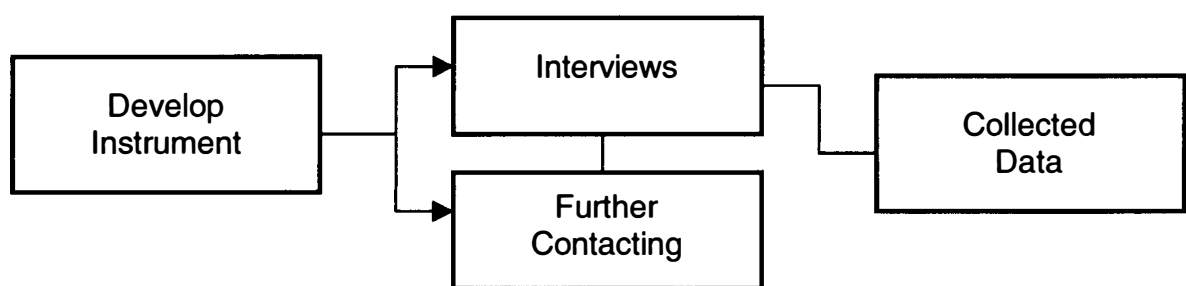


Figure 7: Contacting target population

Stage 3: Interviews

During Stage 3 the bulk of interviews were conducted, at the same time the data were collated into a readable format, with each question having the responses listed in order of interview. Those participants who did not commit to an interview but did complete the question schedule returned it during Stage 3 for analysis. Stage 3 was the most time consuming during which referrals by interviewed participants allowed for further contacting of other participants and subsequent interviews. Figure 8 shows Stage 3 as the interview process where the majority of interviews were conducted and data were collected during which further contacts and interviews took place.

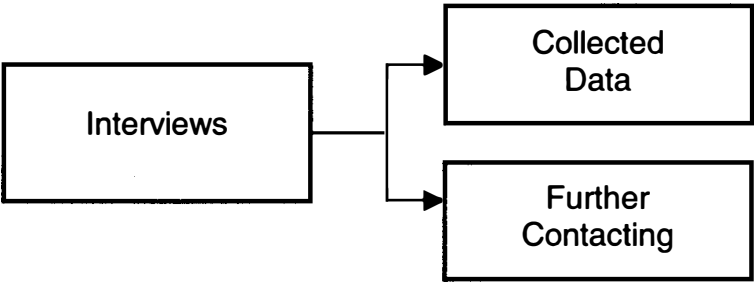


Figure 8: Interview Stage

Stage 4: Hierarchy of skills and knowledge

During Stage 4 data were collected and collated from the interviews and returned question schedules. During Stage 4 some initial analyses were conducted together with the collating of the data to develop the hierarchy of skills and knowledge. Figure 9 shows the data handling procedure and the development of the hierarchy of security skills and knowledge during which the final collection of data took place.

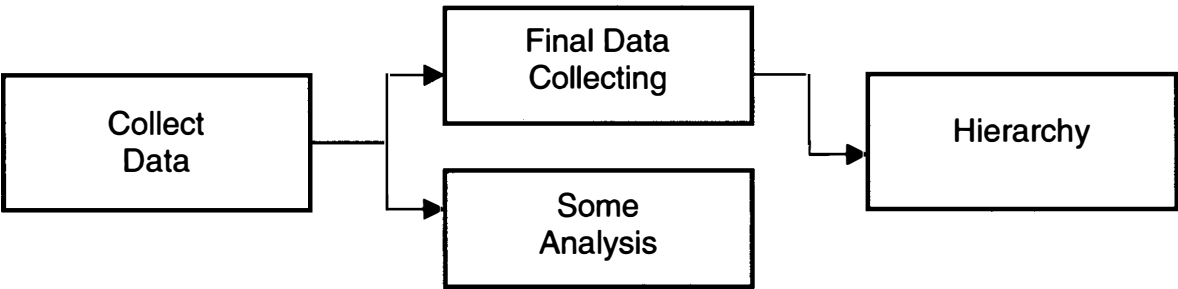


Figure 9: Hierarchy

Stage 5: Syllabus model

Stage 5 allowed for the analysis of the data to fully develop a hierarchy of skills and knowledge, which was used to develop a security management syllabus model. The data analysis provided the necessary knowledge to formulate a conclusion as to the current state of the education of Security Managers and the framework for employment in the security industry and security field. Figure 10 shows the analysed data and hierarchy of security skills and knowledge which were used to develop the ‘Security Syllabus Model’.



Figure 10: Syllabus Model

Stage 6: Conclusion

Stage 6 compiled all the research into a context that enabled conclusions to be drawn from the study. It is believed that the methodology presented enabled all research questions to be answered and has provided an insight into the educational needs of the security industry, as well as set the framework for

further research in the security discipline. Figure 11 shows the final stage of the research project.

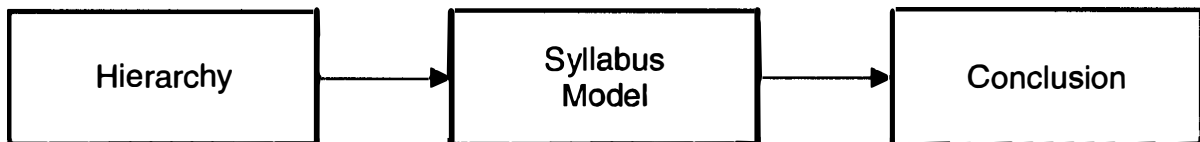


Figure 11: Conclusion

Sample and Subject Selection

The opinion and perception of two groups and a subsequent third group were sought, which included professional security generalists, specialists and experts and Non-Security Managers. Non-Security Managers were included, as they are responsible for employing and facilitating Security Managers. For the purpose of the study the profile of the population was developed, by asking participants if they considered themselves to be generalists, specialists or experts.

Group1: Security Managers

The Security Managers formed a group that contained all those who are responsible for security for their department, organisation or company.

Group 2: Non-Security Managers

The Non-Security Managers formed a second group that contained those who are responsible for the co-ordination of the Security Manager or are the employer of the Security Manager.

Group C: Security Consultants

The Security Consultants formed a third group and contained those who were either employed by a consulting firm or self employed.

Generalist

Those who rated themselves as generalists considered their skills and knowledge as general to the security discipline.

Specialist

Those who rated themselves as specialists considered their specialised skills and knowledge in the area they perform most of their work.

Expert

Those who rated themselves as experts considered their skills and knowledge in a particular area of expertise in security.

Target population – the target population of the study is the group to whom the results will be generalised. The target population was persons in the security

industry or security field or contact with the security field, as part of their job and organisation function within the Western Australia populous.

Sample population – the study required access a sample population to present the data for analysis. The sample population was designed around two groups, and subsequently the study identified a third group that could not be ignored in order to provide quality and relevant data, as Security Consultants are a large component of security services.

The participants of the sample population were those who contacted the researcher or were contacted by the researcher by telephone to determine willingness to participate. Through follow-up phone calls to all those who were sent the interview questions, those that were willing arranged times to meet at the participants' place of work in order to conduct the interview. Those who did not have the time for an interview returned the questions with comments in the spaces provided.

Rate of Response

There were 65 targeted organisations and individuals, and the few individuals were Consultants with the majority of the target population being Security Managers (or the person responsible for security). Two question schedules were sent to each Security Manager requesting a Non-Security Manager or supervisor be involved. It is estimated that there were approximately 128 possible targets for the question schedule, by excluding two independent consultants there were 63 organisations that had two possible participants. By including the independent consultants and the 63 organisations the target population was estimated as 128.

From the 128 targeted population the rate of response was 23.4%. The sample population consisted of 25 interviews and 5 returned responses, totaling to 30 responses. Of the 30 responses, 12 participants were single representations of their organisation while nine organisations provided two representatives, which summed to twenty-one organisations. If the rate of response is calculated by organisations and not the individuals, then the rate of response would be 32.3%. Alternatively, if the rate of response is estimated by responses and organisations, then the rate of response was 46.15%.

The researcher was satisfied with the number of responses although a greater number would have been preferred. However, due to time and geographical

limits the researcher and supervisor deemed 30 responses as sufficient. For the purpose of this study the realistic rate of response was 23.4% as the target population approximated 130.

The sample population was categorised into three groups: Group 1, Group 2 and Group C. The largest were the Security Managers (G1) who constituted 56.6% of the sample. The Non-Security Managers (G2) were 20.0% while the remainder of the sample, consisting of Consultants (GC) was 23.3% (Table 1). The sample population was divided into three sub-groups: generalist, specialist and expert. The generalist sub-group made up 40.0% of the sample population, equal to the specialist sub-group, while the remaining 20.0% were experts (Table 2).

Table 1: Sample Population

Sample Population		
Group 1	17	56.6%
Group 2	6	20.0%
Group C	7	23.3%

Table 2: Sub-groups of sample population

Sub-group		
Generalist	12	40.0%
Specialist	12	40.0%
Experts	6	20.0%

Table 3: Sample Population Groups and Sub-Groups

Sub-group	Sample		
	Group 1	Group 2	Group C
Generalist	29.4%	66%	42.8%
Specialist	52.9%	16.6%	28.5%
Expert	17.6%	16.6%	28.5%

The data were collected post interview, when the participants were asked whether they were generalists, specialists or experts in their field. Each participant’s response was recorded along with their profile (all participants happened to be male), from which the sample population profile has been constructed. Table 3 shows the distribution of the sub-groups against the distribution of the sample population groups.

Sample Population Analysis

The most specialised field were G1 and the most generalist were found in G2, while GC were more evenly distributed as generalist than specialists and experts. This information from the sample population does not reflect the accepted notion that Security Consultants are specialists and Security Managers are generalists.

This could be an indication of a lack of training or education or the (preconception) notion that Security Managers are specialists in a general management field, and not generalists in a specific security field.

The characteristics and profiles of the sample population show that the highest percentage of generalists was found in the Non-Security Managers group, and followed by the Consultants. The highest percentage of experts was found in the Consultants group, followed by the Security Managers and then Non-Security Managers. The highest percentage of specialists was found in the Security Management group followed by Consultants and the least specialised were Group 2.

The Consultants (GC) had an even distribution of specialists and experts with a higher percentage of generalists, while Group 2 had a similar distribution pattern. It was found that there were equal numbers of experts and specialist to a majority of generalists. In contrast Group 1, Security Managers had the least number of experts to specialists and less generalists to specialists than both Group 2 and Group C.

Analysis of the sample population distribution shows that the Security Manager seems to be more specialised than Non-Security Management, which may be expected, but the Security Managers are likely to have a more specialised background than Non-Security Managers. While Consultants are evenly

distributed as generalists and specialists demonstrate the varying differences in areas of security skills and knowledge compared to a Security Managers broad base of skills and knowledge.

The researcher postulates that 'Security Management' is a specialist field of management, and it is broad based on a generalist perspective of security. In contrast the Security Consultant's perspective are generalist in a specific field, together with those who have specialist perspectives from specific areas of the security field. The difficulty in ascertaining expert credentials and supporting claims makes the sub-groups of experts the lowest percentage of the sample population.

Instrument

The instrument used comprised of three components, the researcher, the interview and the questions. Each component can be described as an instrument, the researcher elicits and record responses, the interview sets the level of interaction and information exchange and the questions prompt the responses. The design of the question schedule allowed the instrument to be used as a questionnaire if needed. The difference in response from the questionnaire was minimal. The questions were developed into an interview schedule during Stage 1, which consisted of 13 open-ended questions (Appendix C).

Data Analysis

Within the qualitative paradigm the analysis of data was conducted using the coding and counting method. As each question was the unit of analysis, each question according to structure had different codes to be counted. Some questions had 'yes' or 'no' options which formed one code, then a justification part to each question formed another code. For questions without options, responses were coded in general themes and counted to show trends. Each question was analysed according to the format and context of the question, analysis of each question is presented in Chapter 4.

Limitations

This study had several limitations arising from the research design. The practical limitation was identified during the study procedures including the acknowledgment and participation of the sample population, arranging the time for interviewing the sample population, and the time taken for the actual interview.

Limitations on the honesty and accuracy of responses was negligible, as those who participated were eager to provide their personnel opinion on the questions and the current education and status of security industry and practitioners.

Limitation of time was perhaps the greatest difficulty, as interviews were time consuming to both arrange and conduct. The time taken to conduct the first interview did not allow for the proposed follow up interview.

A further limitation to the study as described by Morley, et al. (1993, p. 127) is that not all participants had the foresight, or were not qualified to make security syllabus comments. While the characteristics of the participants may have been a limitation to the study, it may further support the need for tertiary qualified Security Managers.

Ethical Considerations

The human participants of this study have professional appointments within a given industry. Ethical consideration of peoples' consent and confidentiality is important for a study involving human participation to ensure the welfare of participants is properly considered and protected (ECU Policies and Procedures Information, 1998). To ensure a high level of ethics in research, the following criteria have been continuously maintained:

- 1) This study may provide benefit to the security industry and academic security programs. Possible benefits include an enhanced professional image of security,

an industry-accepted security program, further development of existing security curricula, and a more competent security graduate to an employer.

2) As participants were contacted by letter and telephone, or facsimile, it was made clear that responses will facilitate the voluntary participation and permission to commence the in - depth interview. Anonymity will be forfeited by response, in which case formal recognition, as a participant will be documented in the final report.

3) There were no health risks to the participants and any inconvenience of the time spent was accepted by the voluntary nature of the study. Formal recognition in the final report will be offered as an offset to any inconvenience, while confidentiality will be exercised on all information that the participants express as confidential. Only information that has the participant's consent will be used as data.

4) The researcher is to be supervised continually throughout the study. Through admission to the Honours program the researcher has met minimum requirements and is considered qualified while under supervision to conduct postgraduate research at the honours level. The supervisor has reviewed all questions in the survey, and the methodology has been designed accordingly.

Face Validity

Associate Professor Clif Smith examined the interview questions and recommended some changes to ensure that each question would provide a relevant response. After face validity of the questions a preliminary pilot test was conducted to ascertain the robustness of the instrument. The results of the pilot study demonstrated that the instrument would satisfactorily fulfil its function.

Pilot Study

The pilot study consisted of a set of thirteen open-ended questions designed as both a questionnaire and as an interview. As described in the Edith Cowan University handbook for post graduate research (1999, p. 12) the, "...pilot study is a preliminary and small scale version of what is intended in the full research study and may be used where there is a need to refine the research problem and methodology."

Two participants were interviewed in the pilot study, providing qualitative data for analysis. The participants provided feedback on format, question construction and relevance as well as the interview process. The questions were seen as satisfactory (Appendix B for Pilot Study and Appendix A for Interview Schedule).

The feedback was positive to the format, questions, interview process and the option of using the instrument as a questionnaire. The interview questions in a questionnaire format was the instrument that was used to conduct the interviews and obtain the data, either through the researcher recording responses or the participant completing the instrument during the interview or prior to the interview. Alternatively, participants completed the questions with written data. The robustness of the instrument used in the pilot study was judged to be satisfactory, and the instrument and data collected were included in the research.

Theoretical Framework

Research in the area of opinions and perceptions of security skills and knowledge is the basis for this study. This study of the perceptions of Security Managers and their employers in the survey has indicated the validity and importance of a common set of core skills and knowledge. This study has developed a hierarchy of skills and knowledge that are required for professional Security Managers and Consultants, and has added to the limited body of knowledge in the field of security education.

Of the required skills and knowledge for Security Managers, only 'practical' and 'life experience' can not be directly learned from a university course. Therefore, the hypothesis of this research is that the required skills and knowledge for a

Security Manager or Consultant could be obtained in a shorter time period and to a greater breadth of knowledge from a tertiary education. This could be achieved through a concentrated 3-4 year security degree program together with 4-5 years practical experience, as opposed to 15 years practical experience with limited or no formal education.

CHAPTER 4

ANALYSIS AND INTERPRETATIONS

Analysis of the results from Appendix D and the interpretations are presented in this Chapter. The analysis was conducted during Stages 4 & 5, where the responses of each question were coded and counted to identify common themes of the participants' opinions and perceptions.

Analysis

Each question of the interview has been used as the unit of analysis. The responses of each question were collated together so as to allow all responses for each question to be coded, counted and compared. By counting the coded responses themes developed, forming the basis of the analysis. The analysis allows the researcher to form conclusions from the data, which can then be used to develop the hierarchy of skills and knowledge and develop the security syllabus model.

Question One: What security skills and knowledge are required to perform the functions of a security manager?

Considering the acquisition of skills requires training and the acquisition of knowledge requires education, there were only seven skills and four knowledge responses from the data that are considered too difficult to certifiably provide or attain from a university. The *skills* that were identified by participants and considered by the researcher as difficult to provide at university include practical skills, contacts, leadership, core business, common sense, customer focus, honesty and integrity. The remainder of skills including management, interpersonal, communication, risk management, budgeting, analytical, and research are all provided and attainable from a university degree.

The *knowledge* identified by participants and considered by the researcher as difficult to provide for at a university were knowledge of security industry, experience and common sense. The remainder of *knowledge* identified by participants included law, threats, security technology, security theory, accounting, business, risk management, analytical and research are most definitely provided and attainable from a university degree.

Question Two: How should those skills and knowledge be attained?

Majority of participants including Non-Security Managers believed that experience was the optimal process for gaining skills. This could be attributed to the lack of formal qualifications and that most participants obtained skills through experience. The next most frequent response was formal courses for skills, as it is probable that those who have completed formal courses would agree to their benefit. There were a further six participants who believed that a combined tertiary and work experience process is how the identified skills should be obtained. The main theme identified from Question Two was that almost half the responses indicated that formal courses and combined courses and work experience were the process for gaining security skills.

Similar themes developed for knowledge, as the majority of participants believed university or TAFE were the appropriate source for knowledge, followed by professional qualification and then experience. The frequency of responses showed that overall for skills and knowledge, 'experience' was mentioned nineteen times while formal courses university, TAFE and combined tertiary and work experience were mentioned twenty-seven times. Training of any type for skills and knowledge was mentioned twenty times. Clearly education, formal qualification and combined training education and work experience as identified by participants is the optimal process for obtaining skills and knowledge than experience.

Question Three: Do Security Managers acquire those skills and knowledge?

This question was probably one of the most difficult for the interviewees to respond and the interviewer to elicit a response. For most participants contact with other Security Managers is limited especially for the Non-Security Managers. Hence participants only had personal experience about themselves or their security manager to provide a response. For this reason the majority of participants (14) agreed that Security Managers do acquire the identified skills and knowledge. A negative response would have indicated a lack of confidence in themselves, their security manager or the field of Security Managers.

There were only six participants who believed Security Managers do not acquire the identified skills and knowledge in the currently accepted levels and processes of education in the security industry. It is proposed that the six participants were either in government security or had held previous positions with the government, indicating the different levels of security between the private sector and the public sector. Interestingly, some of the six participants that believed Security Managers do not acquire the skills and knowledge were not previously law enforcement officers.

There were also six participants who answered 'Yes/No', and there are some in industry that do acquire the necessary skills and knowledge while the remainder

do not. It is suggested that these participants were mainly consultants who have more contact with a broader range of Security Managers and industry.

Question Four: Do you have a formal qualification?

Yes: What qualification do you hold?

No: Would you seek a formal qualification?

Table 4: Percentages of formal qualification distribution within the sample population

Qualification	G1	G2	GC	Sample Pop.
Other	5.8	-	28.5	10.0
Certificate	17.6	16.6	14.2	16.6
Diploma	23.5	16.6	14.2	20.0
Advanced Dip	5.8	-	-	3.3
Degree	20.4	66.66	42.8	40.0
Graduate Cert.	5.8	-	14.2	6.6
Graduate Dip.	5.8	-	14.2	6.6
Masters	11.76	16.6	-	10.0

Of the sample population less than half were degree qualified while only 20.0% having diploma level qualification, and 16.6% possessing a certificate. The least qualified group was G1 Security Managers (Table 4) although this group had the highest number of degrees and higher degrees on average, G1 were the least qualified (Appendix D). The distribution of certificates and diplomas were

relatively similar with G1 slightly higher. These data do not conform to the proposed model of the security industry's education levels (presented in Chapter 1), hence the gap identified by the educational needs analysis thus demonstrating the difference in actual to desired education levels.

These data show that in comparison to Non-Security Managers, Security Managers on average are far less qualified, while Security Consultants shared a higher number of qualifications. There are two possible explanations for this outcome. Firstly, that security is not seen as a priority function, hence there is no need to employ a highly qualified person to perform a low complexity function. Secondly, employers either believe, that those who were police or military trained are the most suitable, or that any personal can be placed into the security function in order to fill the position regardless of formal qualification.

Question Five: Should Security Managers be tertiary qualified?

Yes: What tertiary qualifications are suitable?

No: What qualification would be beneficial.

Of the thirteen participants responding in the affirmative, six indicated that a security qualification with a mix of relevant courses was relevant to the position.

Eight participants indicated a negative response, with two of the eight stating that it would be necessary in the future, while the remainder (17) believed it was not necessary for Security Managers to be tertiary qualified as experience and background are sufficient, while some stated that TAFE or industry courses were appropriate.

There were seven participants who were unable to respond to the proposition, as they were undecided or had a different response. Two participants believed a tertiary qualification was more pertinent to Consultants and not Security Managers. The remainder believed it depends upon the person, and for people entering the industry they definitely need tertiary qualifications, however recognition of experience for those already in the field must be given.

The qualifications that were most frequently identified as suitable were security, risk management and management. Other qualifications identified included general commerce, human resource management (HRM), occupational health and safety (OCH&S) and electronics degrees and one participant believed the ECU course was most suitable (Appendix D).

Question Six: Does the security industry need a formal qualification program?

Yes: To what level?

No: What does the industry require?

All participants indicated a positive response, with eight responses to a degree level, three responses for a degree in security, while two responses indicated the ECU Diploma and Advanced Diploma, and two participants stated that licensing was all that was required. The general consensus was that the security industry needed some form of formal representation or stability; however less than half believed a degree qualification is needed (Appendix D).

Question Seven: How would such a course be beneficial?

Most participants explained how such a security course would be beneficial with 'increased professionalism', 'awareness of industry to professional standard', and 'improved standards'. The benefits of such a course were numerous and specific, however there was a contrast between the participants' response for Question Six to Question Five which established the need for a formal qualification and that Security Managers should be tertiary qualified (43%). More than half of the participants believed a degree was not the required level,

however those same participants have identified the benefits of such a course in Question Seven. This indicates that while they recognise the benefits of a tertiary course they do not want to declare that a Bachelor level course is required because 71.6% of Security Managers did not have a formal degree qualification (Table 4).

Question Eight: To whom should such a course need to be developed for? (ie) school leavers, security practitioners, and other industries. What level of tertiary study would you consider necessary? (eg) Bachelor / Master / Doctoral.

There were fourteen participants that included school leavers in their response. Three of the fourteen believed only school leavers, while eleven stated both school leavers and practitioners. There were nine responses that stated security practitioners (not school leavers), six general responses and only one non-response. The responses to 'what level' were slightly different to Question Six, which asked the repeat question as to what level qualification? Nine responses for a Bachelor level and two for a Masters degree were counted, which is the same number of responses to Question Six. However fourteen responses to this question were "All levels" (TAFE to Uni). It can be postulated that the same participants responded consistently while other participants may have changed their opinion slightly towards the level of qualification following Question Seven.

It can be postulated that the general consensus amongst the participants who responded 'school leavers' and 'practitioners', believe that those in industry would benefit and those that are entering would have a competitive advantage. In contrast, those participants that believed the course should be designed for security practitioners said that "security is a mature age persons vocation", "security is too specialised for school leavers", and "life experience of school leavers is too limited for such an Industry" (Appendix D).

Question Nine: What content would you recommend for a security course?

The participants identified fifty-three different subjects, topics and suggestions, as four participants responded by stating "the ECU course with hands on experience." The most popular responses in order were: risk management, law, physical security, OCH&S, psychology, management, investigation, technology, electronics, training and Information Technology security (Appendix D).

The content identified by the participants matched the knowledge identified in Question One. Therefore it seems that all the knowledge excluding experience, common sense and knowledge of the industry that is required by a security manager, can be gained at a university which provided the identified content matter.

Question Ten: Would you employ a graduate with a security qualification?

Yes: What level in the organisation and what roles?

No: For what reason? Could these reasons be overcome?

There were twenty-three responses to 'yes', three participants did not respond, two indicated 'yes and no' and only two said 'no'. Most participants believed entry level was appropriate, with four participants stating 'to assistant manager' and others responded with 'trainee managers' or 'entry level management'. Of those that responded 'No', one believed it would be a waste of the graduate's time gaining the qualification to employ them as a guard, and the other stated 'not for this organisation' (Appendix D). While it seems that 75% of participants would hire a graduate as that was their personal opinion, the question perhaps should have asked:

Do you have the need to employ a graduate of a security qualification?

This question probably would have provided a more realistic overview of employment prospects for graduates.

Question Eleven: How would you provide a graduate with practical development experience?

There were various methods and options of how employers would provide practical experience for graduates. 'On the job training' was the most frequent response together with industry contacts and combined 'on the job' and formal training. These responses reflect the same types of practical experience methods employed by other occupations and professions. It can be stated that the opinions of the participants were the same for providing any graduate with practical experience . Therefore graduates of a security program do not seem to require any different or special type of practical experience processes.

Question Twelve: Does the security industry need tertiary qualified security practitioners? Western Australia / Eastern States/ National? What type of work would these practitioners perform?

There were twenty-one responses to 'Yes', nationally, while there were seven responses that were not specific and two participants had no response. The type of work identified by participants included management, consulting and managing security operations.

Majority of participants believed that the security industry need tertiary qualified security practitioners. Ten percent of the sample believes the security industry does not need tertiary qualified security practitioners but will in the future. In contrast 70% of the sample said the industry does need tertiary qualified security practitioners.

Question Thirteen: Is security a profession?

Yes: What makes it a profession?

No: How could security establish itself as a profession?

Seventeen participants indicated a positive response, with various reasons including, 'the complexity involved' and 'like in all areas one can be professional'. Five participants proposed that security was not a profession, while two participants did not respond and six participants were undecided.

While the majority of participants believed that security is a profession, only thirteen participants believed Security Managers need to be tertiary qualified. This characteristic is not common with a profession, as tertiary qualifications are prerequisites for entry to all professions. One participant said, "Security positions such as management roles are a profession but they are not recognised as an academic profession, but rather a profession which is gained through

experience". This is a common attitude within the security industry as demonstrated by the data (Appendix D).

Interpretation

From the analyses of the data collected from the sample population the following interpretations have been made. Excluding practical skills, contacts, leadership, core business, common sense, customer focus, honesty and integrity, experience and knowledge of the security industry, all the identified skills and knowledge are attainable from university.

Question Two demonstrated the contrasting opinion that 'experience' was the preferred way of obtaining skills, while only 50% believed knowledge should be obtained from university or TAFE, while some suggested combining education and training. Still, the majority of Security Managers rely on experience, hence to confirm that a better way of obtaining the skills and knowledge identified, their ability and competence is under scrutiny, and this is supported by the analysis of Question Three.

By having just over half the participants responding 'no' or 'yes and no' to Question Three indicated that there were doubtful perspectives as to whether Security Managers obtained the skills and knowledge required. The analysis of

Question Four revealed that Security Managers were the least qualified group from the sample population, again supporting the argument that some or very few Security Managers do acquire the skills and knowledge required.

The trend emerging continues, as analysis of Question Five shows 26.6% of participants believe that Security Managers do not need to be tertiary qualified and 23.3% recorded 'yes and no' while 43.3% indicated 'yes'. The belief of whether Security Managers should or should not be tertiary qualified is really determined by an individual's personal experience, status, the organisation's priority to security and the job function of security by identifying the security function within the given organisation. For example, if a company had no formal policy or function for security, then why employ a tertiary qualified person when a low to medium salary attracting less educated personnel is acceptable by the organisation. Hence the low priority on security across private and commercial sectors, and the low education levels within the security field.

The analysis of Question Six again demonstrates the existing low levels of education, as well as the lack of recognition that education levels need to be increased. This was supported by less than half the participants responding to the need for formal qualifications in the security industry at Bachelor level. Even though all thirty participants indicated that 'yes', the security industry needed a formal qualification program, the majority believed licensing was required. In contrast 96.6% of participants believed a formal qualification would be beneficial

in various ways, including increased professionalism, improved standards and awareness of the industry.

A contradiction emerged from the analysis of Question Twelve. As mentioned, Question Six demonstrated less than half the sample thought that a degree qualification was needed by industry, however 70% of the sample believed that industry needed tertiary qualified security practitioners. This could be seen in two ways. Firstly, the sample accepted that the security industry needs tertiary qualified people but not necessarily a security qualification, and it was not a necessity for Security Managers. Secondly, Security Managers believe Consultants need tertiary (security or otherwise) qualifications, and Consultants believe both Security Managers and Consultants need tertiary qualifications.

These common themes and opinions do not seem to be representative of the advanced, complex and specialised nature of security. As security advances through technology, increases in criminal activity, competitive markets, social imbalances and a growing population, the beliefs and opinions held by some participants in the sample population are either too narrow, or they do not want to acknowledge that they lack the skills and knowledge required. Nevertheless the future security manager or consultant will not be able to rely on the experience process, but through formal education and training.

Those opinions of some Security Managers are confirmed by the responses to Question Eight, as 30.0% of the sample do not believe security and security courses are suitable for school leavers. While most fields and industries have some process of recruiting, educating and training for future participation, security does not. It should be clear that such a security course should be developed for both security practitioners (consultants and managers) and school leavers, considering the education levels of the sample population, which does not match the proposed model of the security industries education levels (Figure 4).

In defence of some in the sample population there are exceptional people who are highly competent and perform at high levels, who do not have a formal qualification. This may be due to formal qualifications being unavailable until recently. There are those in industry that can not be discounted for lack of formal qualifications which is a common theme from the results of the study. Many participants believed that the evolution of tertiary security courses does not disqualify those who have and are working in the security industry, as years of relevant experience has been sufficient for many years.

The response to Question Ten is encouraging with 76.6% of the sample saying they would hire a graduate of a security course. However, the personal opinion of the participants for this question does not provide a realistic insight into employment opportunities for graduates. Over half the sample believed that

security is a profession, however less than half the sample believe Security Managers need a tertiary qualification. This is a contradiction to consider a field as a profession, without a foundation in academia. Until those in management positions for security consider specific education and training as a superior process for developing skills and knowledge than experience, then the future Security Managers will not evolve to executive levels or be considered part of the upper management level in an organisation.

The reason why experience is not the optimum process for obtaining skills and knowledge is because all individuals' personal experience are different. For a collective of security personnel to receive different forms and levels of experience and on the job training, there is no real measure of competence; only status through salary, budget, and years in the industry. However, formal education and training provides a benchmark for personnel to be measured, and together with practical experience develops levels of competency in applying the knowledge and skills obtained.

It was clear that the majority of the sample were not aware of courses at Australian universities. Those who had either some involvement in, or had completed an ECU course (Appendix D) were satisfied with the standard and relevance to the security field. There were no participants that had enrolled or completed any other tertiary security course. The awareness of the sample population to security education was very limited, while most consultants were

familiar with the ECU program, however no Non-Security Managers were aware of the ECU programs until this study. There were also very few Security Managers who were a current member of ASIS. The consultants again were the most informed about the ASIS organisation. It was clear from the study that more collaboration and marketing for security education is needed.

CHAPTER 5

OUTCOMES AND RECOMMENDATIONS

This chapter presents the outcomes developed by the study, in the form of a hierarchy of skills and knowledge required for a Security Manager, and a security syllabus model. The outcomes should be used with the 'Framework for Research' as seen in Chapter One so that a better understanding of security education and the security industry is achieved. This chapter will also provide recommendations for security education, the security industry, the commercial and industrial sector and the government. This chapter also makes recommendations for further research in the field of Security Management and education.

Outcomes

From the data analysis, a hierarchy of skills and knowledge and course content were developed. The responses from the sample population were grouped and counted, then listed from most to least frequent forming a list of skills and a list of knowledge. From the hierarchy of security skills and knowledge a security syllabus model was developed. The 'Security Syllabus Model' is based on the

identified skills and knowledge and the identified course content, hence the model is not a holistic 'syllabus' model, but a foundation for syllabus development.

Hierarchy of Security Skills and Knowledge

A main objective of the study was to develop a hierarchy of skills and knowledge in the domain of Security Management. From the results of the study the following lists of skills and knowledge were developed by counting the frequency of all responses to question one of the survey. The most frequent to least frequent responses are shown in Figure 12. The responses that were given for both skills and knowledge are highlighted in Figure 12 and the responses that were identified as too difficult to certify or obtain from a university are marked with an asterisk.

These skills and knowledge are the core requirements of a security manager as defined in Chapter Four. This list may not be fully comprehensive but is a foundation for codifying and quantifying the job function of a security manager. Hence using this foundation a generic core syllabus model has been developed to establish a standard of entry to the security field for graduates.

SKILLS	KNOWLEDGE
Management Interpersonal Communications Technology, technical, electronic Investigative Practical* Contacts* Risk management Understanding security Budgeting Leadership* HRM Core business* Analytical IT Research Problem solving Common sense* Conflict resolution	Law Knowledge of security industry* Threats Experience* Security technology Security theory Risk management Management theory Technology Business Accounting Investigative procedures Security equipment Physical security Security standards IT Systems Life safety procedures Cultural knowledge Asset protection
Negotiation Crime prevention Selling security to management Customer focus* Planning and design Implementing policies Industrial relations Honesty and integrity* Project management Education	Analytical Research Intelligence Industrial relations HRM Common sense Depth of knowledge Contract management 50% art 50% science* Duty of care Equal opportunity Ethics Fraud Minimal technical knowledge How people perceive security Surveillance

Figure 12 : Hierarchy of Skills and Knowledge

The argument is that these skills and knowledge can be taught through an appropriate tertiary course of study and obtained from a university degree program. This is the academic approach to acquiring security skills and

knowledge. However, eleven identified skills and knowledge can not be certifiably provided by a university, and some in the security industry would argue that the pragmatic approach (experience) is the optimal one. Then the question needs to be asked, would the pragmatic approach certifiably provide the same amount and the same level of security skills and knowledge as would the academic?

Security Syllabus Model

Using the hierarchy developed from the sample population's responses, the identified skills and knowledge have been sub-grouped into their relevant subject areas of *Security*, *Business and Management*, *Computing and IT* and *Generic*. Using the four subject areas the 'skills set' have been grouped according to relevance and importance, as has the 'knowledge set' (Figures 13, 14 and 15).

For the 'skills set' and 'knowledge set' the required security skills and knowledge are presented under the security section, so that these skills and knowledge will be the foundation for the security 'Syllabus'. The business and management skills and knowledge can be found in existing business and management courses, as can the computing and IT skills and knowledge. These courses can be used to supplement the security skills and knowledge as a minor or elective subject areas.

SKILLS SET	
SECURITY	BUSINESS/ MANAGEMENT
Technology, technical, electronic Investigative Risk management Understanding security Conflict resolution Crime prevention Selling security to management Planning and design Implementing policies Project management	Management Interpersonal Communication Budgeting HRM Conflict resolution Negotiation Implementing policies Industrial relations Project management
GENERIC	COMPUTING / IT
Interpersonal Communication Analytical Research Problem solving Education	Technology, technical, electronic IT

Figure 13: Skills set for Security Syllabus Model

KNOWLEDGE SET	
SECURITY	BUSINESS/ MANAGEMENT
Law Threats Security technology Security theory Risk management Technology Investigative procedures Security equipment Physical security Security standards Life safety systems Cultural knowledge Asset protection Intelligence Duty of care Fraud How people perceive security Surveillance	Law Management theory Technology Business Accounting Cultural knowledge Industrial relations HRM Contract management Duty of care Equal opportunity Ethics Fraud
GENERIC	COMPUTING / IT
Analytical Research	IT systems

Figure 14: Knowledge set for Security Syllabus Model

The same process was applied to Question Nine of the interview schedule where, the identified 'course content' has been placed in the same format by relevant subject group and in order of relevance and importance, according to frequency of response (Figure 15). By identifying the course content in addition to the skills and knowledge, the 'Security Syllabus Model' has more detail in order to be used as a guideline for further syllabus development.

The 'Security Syllabus Model' is comprised of the 'skills set' the 'knowledge set' and the 'course content'. The course-content only shows the identified topics and subject areas. Within a full course content, specific components of each subject area would be identified, together with delivery methods and outcomes. Therefore the 'course content' (security syllabus) and the 'skills and knowledge set' provide a model or framework for more comprehensive syllabus development and design, culminating into further research and design for 'Security Curricula'.

Considering the more extensive 'knowledge set' and the participants' responses to Question Two of the interview, where more participants favored university or TAFE education for obtaining knowledge than experience, it can be postulated that the university (academic) education would be the optimal process for obtaining the necessary security knowledge. Conversely, the 'skills set' identified only seven skills that would not be certifiable by a university as attainable, however more participants favored 'experience' (pragmatic) as the optimal

process for obtaining skills. This is the paradox for most if not all higher education courses.

COURSE CONTENT	
SECURITY	BUSINESS/ MANAGEMENT
Risk management Law Physical security Investigation Electronics Security technology Personal security Surveillance Business continuity planning CPTED Risk Fraud CCTV Disaster recovery planning Security awareness Information security Intelligence Threats Security industry Vetting Conflict resolution Facility management Communication security Project security Operation security Interviewing	OCH&S Psychology and human behavior Management Training Commerce and business Architecture Legislative HRM Ethics Marketing Budgeting Project management Industrial relations
	OTHER: Engineering Electrical engineering Relevant project work Lectures from industry
GENERIC	COMPUTING / IT
Computer skills Written and oral reports First aid Technical	IT security

Figure 15: Course Content for Security Syllabus Model

As most professions, occupations or fields have an experience component, the paradox for higher education is providing the optimal level of education and practical experience in teaching the syllabus, in order to ensure graduates have the ability to apply their knowledge and skills to the work environment (competency).

Through analysis of the hierarchy of skills and knowledge and the proposed 'Security Syllabus Model', it has been postulated that the optimum process for obtaining the identified skills and knowledge would be the academic approach. The overall advantage of the academic approach is not just the benefit of knowledge and generic skills but a better investment for the community and economy, while the disadvantage is the lack of practical experience.

However, after a concentrated time in practice and 'on the job' learning, the practical skills will be developed thus adding to the existing skills and knowledge. This disadvantage is transient, however it can be reduced through practical and workplace education. Such methods include internships, practical placements, industry projects and work experience.

Recommendations

There are a number of recommendations resulting from the study, as the small number of participants limited this survey. Therefore, the results and analysis are only representative of the sample population, hence the recommendation for further research needs to be conducted.

A recommendation for further research is utilising a larger sample population, and could include:

- ❑ Job function of Security Managers in different levels of security and environment.
- ❑ Effects of perceptions of security on the job function and status for Security Managers (including remuneration).
- ❑ Needs of industry, commerce and government for security educated people.
- ❑ Career pathways in security and the effect of security education on those pathways.
- ❑ Industry and commercial acceptance of security education.

Other recommendations focus on the development of the security syllabus. As the evidence shows, combining formal and practical education is the preferred method for acquiring skills and knowledge. Although this has not been proved by the research, this method was the preferred process identified by majority of the

sample population. This could be attributed to their perception of education and practical experience as opposed to their knowledge of empirical research into education and training.

Another recommendation is to incorporate practical work experience into the syllabus. This may be achieved in numerous ways, therefore the third recommendation is to research methods and systems of incorporating practical work experience components into the syllabus.

Finally, recommendations to industry and the private sector, the higher education system should be viewed as a resource for new concepts, fresh perspectives and a valuable source for recruiting the security educated. Awareness of security and security education needs to be elevated, through marketing, advertising, seminars, workshops and publicity. Therefore students, as well as the university need to promote the industry, the discipline and the advantages of tertiary educated security people.

CHAPTER 6

CONCLUSION

The discipline of security education lacks a recognised core security syllabus needed to develop a standard level of entry to the field of Security Management. Little information is currently available about security education in Australia and there is no centralised source of information about such education. There is also comparatively little information exchanged across institutions, government and industry.

As a result, institutions of higher education have developed education programs in their own area of expertise and markets. This study examined the education profiles and skills and knowledge required for Security Managers conducted through an educational needs analysis of the security field.

The aim of this study was to contribute to the security field by exploring and analysing the skills and knowledge required to perform the function of a Security Manager. The study set out to identify the security skills and knowledge and to survey security and non-security personnel's perceptions of skills and knowledge.

Within the qualitative paradigm, the survey used the interview method to collect and analyse the opinions and perceptions of Security Managers and Non-Security Managers of security skills and knowledge. The study then developed a hierarchy of skills and knowledge in order to formulate a core 'Security Syllabus Model'.

The methodology of the study was conducted in six stages, which defined the research procedure. These stages included: the developed and testing of the instrument, contacting the the target population, interviewing the sample population, developing the security hierarchy of skills and knowledge, developing the 'Security Syllabus Model' and making final conclusions.

The results of the survey were representative of the participants from the sample population, therefore the results are not conclusive. However, the results do provide a foundation for further syllabus development in security education.

Outcomes of the study were a hierarchy of security skills and knowledge, and a model for a core security syllabus. The skills and knowledge can be used to measure future requirements of Security Managers, and the model syllabus can be utilised in course development and design for security education. By developing the security skills and knowledge hierarchy and the syllabus model using the opinions and perceptions of Security Managers, Non-Security

Managers and Security Consultants, this study has addressed the research questions.

This study produced recommendations that include the need for further research in security education and industry needs. The implications for Security Managers, security industry, and society show that there is now a measure of skills and knowledge that Security Managers can compare, which can be certified by a university within completion of recognised qualifications.

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Academic Security Education:

**The Development of an Industry
Based Security Management
Curriculum**

Interview Questions

PILOT STUDY

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Bachelor of Science (Security) Honours

This interview is part of a Bachelor of Science – Honours degree thesis project at Edith Cowan University. The research seeks to identify the set of core security skills and knowledge required to function as a professional security manager / consultant. The purpose of this study is to provide a model of an industry focused security syllabus for tertiary education.

This study is investigating what industry experts believe should be included in a security management degree and who would benefit from the development of such a course. In order to obtain personal opinions in regards to the research subject, a structured interview method is being used. The following is a question schedule to allow participant's time for preparation, space for comments and answers is provided. Please complete the questions prior to the interview abmission.

Your participation is voluntary, acceptance of invitation will be confirmed by scheduling an interview time. You will remain anonymous, unless you wish to be personally acknowledged for your participation.

Thank you for your time and assistance

Layne Hesse

Interview Questions

Interview Schedule

1. What security skills are required to perform the function of a security manager / consultant?

What security knowledge is required to perform the function of a security manager / consultant?

2. How should those skills and knowledge be obtained?

SKILLS

KNOWLEDGE

3. How do Security Managers / consultants acquire those skills and knowledge?

4. Do you have a formal qualification?

No – Would you seek a formal qualification?

Yes – What qualification do you hold?

5. Should Security Managers / consultants be tertiary qualified?

No – What qualification would be beneficial?

Yes - What tertiary qualifications are suitable?

6. Does the security industry need a formal qualification program?

No – What does the industry require?

Yes - To what level?

7. How would such a course be beneficial?

8. To whom would such a course need to be designed for?

I.e. school leavers, security practitioners, and other industries

What levels of tertiary study would you consider necessary? E.g. Bachelor, Masters, Doctoral

9. What content would you recommend for such a security course?

10. Would you employ a graduate with a security qualification?

Yes – What level in the organisation and what role?

No – For what reasons?

Could those reasons be overcome and how?

11.How would you provide a graduate with practical development experience?

12. Does the security industry need tertiary qualified security practitioners?

W.A / Eastern States / National?

What type of work would those practitioners perform?

13.Is security a profession?

Yes – What makes it a profession?

No – How could security establish itself as a profession?

APPENDIX B

Pilot Study

In order to test the questions and interview technique a pilot study is necessary. The pilot study provides feedback on the research method and tools. The primary source of data will be interviews, the secondary source of data will be returned questionnaires. The information sent to subjects had the facility to be returned as a questionnaire. As the same questions were needed for both the primary and secondary source of data it was deemed only necessary to administer the primary source for the pilot study, a returned question sheet was only intended as supporting data.

The pilot study provided insight into the different formats that the interviews would occur. The sample population for the pilot study consisted of two participants. The two participants were selected for their background, experience and accessibility. Each participant chose a different format for the interview. One chose to write the responses while discussing them and the other selected to discuss each question while the interviewer took notes during the interview.

Interview kit

Included in the kit was an interview question schedule with space for responses, to allow participants to prepare answers in advance for the interview and to allow for some data collection in the event that an interview was not possible. Each kit contained two copies of the interview questions, with the second copy intended for the Security Managers' General Manager. Each kit contains a covering letter from the American Society of Industrial Security (ASIS) expressing full support for the research project, and a letter from the researcher explaining the project aim requirements.

Method

An interview kit was forwarded to two lecturers from Security Science in the school of Engineering and Mathematics, after the subjects agreed to participate. Both subjects received the same kit, which contained a copy of the researcher's letter addressed to the employer or supervisor of both participants. Subject one passed the second interview schedule and letter to the employer, however subject two did not follow the request. This difference in action demonstrated the range of interpretation that could be present in the research instructions.

It was decided that the names and addresses already obtained would receive two copies of the interview schedule. The interpretation of instructions from the letter and the available time and interest of both the employer and security manager will determine the rate of response and number of participants from both group 1 and group 2.

The interview in which the participant chose to write the response and discuss them took less time than the interview processes where the interviewer took notes. The difference in duration can be attributed to the time taken to write notes and probe each question when the interviewer writes the responses. It is postulated that majority of the interviews to be conducted will follow the format experienced with participant 2 where the interviewer conducts the interview by probing each question and taking notes, in contrast to the interview with participant 1 who took more control of the interview.

Pilot Study Responses

Question 1

Part A

Participant 1:

Review, audit, monitor, BCP, evacuation, interview skills, investigation, monitoring, conflict management, emergency response, risk management skills, practical, safety, writing and communication, interpersonal skills.

Participant 2:

Operations management skills, personnel management skills, planning operations, assessing threat and risk, must understand core business, present a business case (justification, sell security to management), risk management.

Part B

Participant 1:

Security theory, including physical / information / computer, fraud, understanding of law criminal / industrial relations / contracts / torts and legal procedures, understand management theory including industrial relations / human resource / training and technology, accounting / budgets.

Participant 2:

Know how and knowledge of threats and options, what options, asses benefits of options, relative costs of options, how to reach a decision within the organisation and the authority to implement the option then monitor the implementation and evaluate.

Question 2

Part A

Participant 1:

Experience, competency based training, on the job training.

Participant 2:

Combined formal training and on the job training

Classes – to learn why

Experience – on the job

Part B

Participant 1:

Training, formal qualification, on the job training, professional certification

Participant 2:

Same as above

Question 3

Participant 1:

Some through disciplined study and professional development, many through on the job training and the fudge factor

Participant2:

NO – many don't seek classroom training, many are not experienced at high risk environments and have limited experience, no formal on the job training, they don't know how to or where to get training.

Question 4

Participant 1:

YES – BA Social Science, Gr. Cert Security, Msc Security, CPP, Ass Dip Admin.

Participant 2:

YES – Bch App Sci Electrical Engineering, Ms (Art) in Admin. By research security and risk management, Cert. 4 control room.

Question 5

Participant 1:

YES – Depends on the job level, Bch for front-line management, Grad Qualification for middle management, post grad for senior management, if qualification is not recent a bridging qualification for security knowledge ie short courses.

Participant 2:

Broad qualification in security, Bch in management.

Question 6

Participant 1:

YES – see Question 5

Participant 2:

YES – multiple pathways, generalist then specialist.

Question 7

Participant 1:

Increase professional knowledge and skills and increase pay, develop standing in professional community.

Participant 2:

Fill the knowledge and skill gap, improve productivity

Question 8

Part A

Participant 1:

All levels of entry to the industry, therefore need different level courses and qualification, see question 5 & 7, use of AQF 1 – 8.

Participant 2:

Multiple pathways, school leavers, industry, ex military and police, academics.

Part B

Participant 1:

All depends on what level, Doctorate more for research and policy roles including academia.

Participant 2:

Mst, Doc for specialisation.

Question 9

Participant 1:

Risk, management, safety, security technology, information security, personnel security, project management, human resource and training, investigations, law torts / contract / criminal, crisis management and emergency management, IT, criminology, fraud, physical security, ethics, intelligence, OPSEC, facility management, computer security and IT security.

Participant 2:

Bch – broad branch, management, technology, risk, intelligence

Mst - specialist

Doc - research

Question 10

Participant 1:

YES – entry-level management with professional development program (assuming school leaver)

Participant 2:

YES - Depending on their experience, junior level – on the job training

Question 11

Participant 1:

Program to develop skills for security management including security and management issues, cert. level 4 approach to basic skill

Participant 2:

See question 10, formal graduate development program of 2 yrs

Question 12

Part A

Participant 1:

YES – everywhere

Participant 2:

YES – all

Part B

Participant 1:

Consulting and management

Participant 2:

General security management, specialists

Question 13

Participant 1:

NO – need to develop common body of knowledge and greater autonomy and enforcement of ethics.

Participant 2:

YES – however, some people are not

Professional industry body, learned society to ensure the integrity of the profession.

There was only one question that was changed as a result of the pilot study.

Question three, which read;

3. How do Security Managers / consultants acquire those skills and knowledge?

As recommended was changed to;

3. Do you think Security Managers do acquire those skills and knowledge?

Yes – How?

No – Why not?

There was one minor change to the interview schedule. The word 'consultant' was removed from each question. The aim of the project is to develop a security management syllabus, while the security skills and knowledge for both manager and consultant is the same, it has been suggested that there is considerable difference in the skills and knowledge for manager to consultant. Hence the interview questions should reflect that difference.

Feedback and Changes

The feedback from the pilot study demonstrated the difference of interpretation of the questions more so than the opinions of both participants. The similarity of opinions could be attributed to both participants being from the same educational

institution, however one participant has only been on the faculty a short while. Other possible reasons for the lack of differing opinion could be bias from educators and not practitioners.

The participants demonstrated the difference of interpretation of Question One, where part two asks, 'what the security knowledge is required to perform the function of a security manager?' Participant one responded with a list of subject areas including, legal knowledge, security theory, fraud, investigations.

Participant two responded to Question One part two by stating that the security manager needs knowledge of how to perform the function by knowing how to identify threats, assessing risks, determining options, implementing and evaluating the option.

While there is no evidence of differing opinions in question one the participants interpretation provided insight into varying answers to key questions. The pilot study did reveal one difference of opinion in question thirteen, 'is security (management) a profession? Yes, what makes it a profession? No, How could security (management) establish itself as a profession? Participant one responded with "NO, need to develop a common body of knowledge and greater autonomy and enforcement of ethics."

Participant two responded, “Yes, but there are some who are not. Professional industry bodies and a learned society help ensure the integrity of the profession”. While the pilot study did not reveal vast differences in opinions it did demonstrate the difference of interpretation of the questions. This may facilitate some ambiguity in the responses or provide a variety of responses and differences in opinions.

To answer Pilot Study Question One, a hierarchy of security skills and knowledge is to be developed from the participant’s response to question 9 of the interview. Participant one elected to list all relevant skills and knowledge content, however participant two identified that a broad content is necessary and only mentioned four examples.

It can be said that with a larger number of participants more content areas will be identified by multiple opinions, which will aid in the construction of the hierarchy of skills and knowledge, which demonstrates again the difference in interpretation of the question and the difference in style of answers or data collected. However, the differences in interpretation does not indicate that there is no difference in opinions, for example, Question Thirteen illustrated participant one was negative and participant two was affirmative.

Data Analysis

In order to analyse the data the participants need to be grouped into a profile that corresponds to the context of their responses. The results of both Group 1 and Group 2 should reflect the area of knowledge and level. The study stated that it would investigate expert opinions, however the word and context of expert needs to be assessed.

The participants were both from group 1, one participant stated being a specialist in security management with nine years experience, and the other a specialist in security technology and an expert in risk management with 14 years experience in security. By categorising the participants the validity of their responses can be justified.

From the responses of the participants in the pilot study it was found that four subject areas were identified by both participants, these include management, risk, technology and intelligence. Further findings identified by both participants were that on the job training is the best way for security graduates to obtain practical skills and knowledge.

The pilot study also revealed that both participants believe the security industry needs an academic security program and that such a course or similar recognised degree is the minimal requirement for a security manager to perform the job function.

The only contrasting finding of the pilot study was that the participants had different opinions as to whether security is a profession. Participant one believes that the security industry is not yet a profession while participant two believes it is, although there are some in the security industry who are not professional.

From the results of the pilot study and the profiles of the participants, the researcher concludes that the opinions of the participants are representative of the larger population parallel with the same profile. The results also conclude that the security industry does need such a qualification as discussed, as well as, on the job training for graduates of a tertiary security program. The list of security skills and knowledge identified by the pilot study has common subject areas essential and relevant to developing a security management syllabus.

Academic Security Education :

The Development of an Industry Based Security Management Curriculum

Interview Questions

Layne M. Hesse

Edith Cowan University

Bachelor of Science (Security) Honours

This interview is part of a Bachelor of Science – Honours degree thesis project at Edith Cowan University. The research seeks to identify the set of core security skills and knowledge required to function as a professional security manager / consultant. The purpose of this study is to provide a model of an industry focused security syllabus for tertiary education.

This study is investigating what industry experts believe should be included in a security management degree and who would benefit from the development of such a course. In order to obtain personal opinions in regards to the research subject, a structured interview method is being used. The following is a question schedule to allow participants time for preparation, space for comments and answers is provided. Please complete the questions prior to the interview abmission.

Your participation is voluntary, acceptance of invitation will be confirmed by scheduling an interview time. You will remain anonymous, unless you wish to be personally acknowledged for your participation.

Thank you for your time and assistance

Layne Hesse

Interview Questions

Interview Schedule

1. What security skills are required to perform the function of a security manager?

What security knowledge is required to perform the function of a security manager?

2. How should those skills and knowledge be obtained?

SKILLS

KNOWLEDGE

3. Do you think Security Managers do acquire those skills and knowledge?

Yes – How?

No – Why not?

4. Do you have a formal qualification?

No – Would you seek a formal qualification?

Yes – What qualification do you hold?

5. Should Security Managers / consultants be tertiary qualified?

No – What qualification would be beneficial?

Yes - What tertiary qualifications are suitable?

6. Does the security industry need a formal qualification program?

No – What does the industry require?

Yes - To what level?

7. How would such a course be beneficial?

8. To whom would such a course need to be designed for?

I.e. school leavers, security practitioners, other industries

What levels of tertiary study would you consider necessary? E.g. Bachelor, Masters, Doctoral

9. What content would you recommend for such a security course?

10. Would you employ a graduate with a security qualification?

Yes – What level in the organisation and what role?

No – For what reasons?

Could those reasons be overcome and how?

11. How would you provide a graduate with practical development experience?

12. Does the security industry need tertiary qualified security practitioners?

W.A / Eastern States / National?

What type of work would those practitioners perform?

13 Is security a profession?

Yes – What makes it a profession?

No – How could security establish itself as a profession?

APPENDIX D

Study Results

Following the completion of twenty-five face to face interviews and five returned questionnaires, each question was analysed, themes and categories were coded and counted. Each question has been listed below with the identified categories and number of responses including the most common and relevant opinions and perspective's for certain questions.

Question One: What security skills and knowledge are required to perform the function of a security manager?

Skills: Management (19), interpersonal (12), communication (11), (technology, technical, electric 9), investigative (8), practical (8), contacts (8), risk management (7), understanding security (6), budgeting (5), leadership (4), HRM (4), core business (4), analytical (3), information technology (3), research (2), problem solving (2), common sense (2), conflict resolution (2), negotiational, crime prevention, selling security to management, customer focus, planning and design, implementing policies, industrial relations, honesty and integrity, project management and education.

Knowledge: Law (16), knowledge of security industry (8), threats (6), experience (5), security technology (5), security theory (5), risk management (5), management theory (4), technology (4), business (3), accounting (2), investigative procedures (2), security equipment (2), physical security (2), security standards (2), IT systems (2), life safety procedures (2), cultural knowledge (2), asset protection (2), analytical, research, intelligence, industrial relations, HRM, depth of knowledge, common sense, contract management, 50% art 50% science, duty of care, equal opportunity, ethics, fraud, minimal technology knowledge, how people perceive knowledge and surveillance.

Question Two: How should those skills and knowledge be obtained?

Skills: Experience (14), formal course (10), combined tertiary and work experience (6), on the job training (5), networking (5), industry training program (4), on the job (3), common sense (2), combined education and on the job experience (2), training (2), degree not essential, cadet / traineeship with a competent employer, aptitude of person, consulting work, employed in a security industry and employer.

Knowledge: University or TAFE (11), professional qualification (7), experience (5), industry magazines and journals (4), seminars and networking (4), training (3), combination of education and on the job training (3), on the job (2), on the job training (2), common sense, committees, internal and external, extensive research, technologies, risk analysis, vulnerability assessment, combination of degree and practical placement for work experience, recognition of prior learning for experienced and thoroughly trained in security without holding any formal qualifications.

Question Three: Do Security Managers acquire these skills and knowledge?

Yes: 14, **No:** 6, **Yes and No:** 6, **Indirect Answers:** 3 and **No Response:** 1

Yes:

- Experience learning on the job
- By experience but to varying degrees
- Length of service, ongoing commitment to improvements
- Depends on background of a manager, their age, when they got into the security area
- Networking
- Networking, periodicals and talking to consultants – no need for security course
- Skills and knowledge are always learned through training and experiences
- If not they should have a job - pick up through experience, forced to learn
- Training (on the job) courses, seminars, keeping informed
- On the job training / developing these skills
- There is no doubt that Security Managers acquire the skills for the job, but they do not always have the theoretical knowledge which the role demands

No:

- Perception regarding management security function is not favourable to acknowledge the importance of education and training
- Knowledge is not there, industry has had no knowledge of how to foster skills and knowledge
- Many don't seek classroom training – many not exposed at high risk levels, no formal on the job training, limited experience, don't know how and where to get training
- Many stay in the area they work, don't spread out
- Not current breed of Security Managers
- Up until the 90's through experience, ex-government into security industry (ie) police or military – Things are changing

Yes and No:

- Some have the skills and some may be lacking in certain areas. It is not possible to answer the question as it varies from person to person. Unable to answer why those who don't have the skills don't have them, could be because they feel secure in their environment and do not need to improve their skills. They probably feel that their skills are sufficient to carry the duties required of them
- Some do, some have a very limited experience base to draw on guards, alarms etc.
- Good one's do, others don't, Caliber and competence, too many cowboys
- The better ones do, US / Europe and some here do but not enough. Sadly most of the security education available in Australia is US orientated
- Those who can assess their own security, others don't and don't know what they need
- Some do and some don't – it is improving

Indirect Answers:

- Some through discipline study and professional development many through on the job training and fudge factor
- Do or fail – depending on the environment
- Not all, behavioural competencies are an important consideration, it's one thing to do a course and pass it, it's another to take that information away and apply it effectively

No Response: Only one participant had no response, even with more probing questions the participant claimed not to have any knowledge of an answer

Question Four: Do you have a formal qualification?

Yes: What qualification do you hold?

No: Would you seek a formal qualification?

Yes: 24 participants hold one or multiple qualifications at various levels. Listed below are the types of qualifications, the number and which group held them

Table 5: Distribution of Formal Qualifications between all three groups.

Qualification	Groups			
	Group 1	Group 2	Group C	Total
Other	1	-	2	3
Certificate	3	1	1	5
Diploma	4	1	1	6
Advanced Diploma	1	-	-	1
Degree	5	4	3	12
Graduate Certificate	1	-	1	2
Graduate Diploma	1	-	1	2
Master	2	1	-	3
Post Graduate	1	-	-	1

The levels of qualifications and disciplines varied greatly. Listed below are the various disciplines in which participants hold formal qualifications:

- CPA (Certified Practicing Accountant) – Tertiary
- Electrical – TAFE
- Business – Bch
- Security Science – Grad Dip (ECU)
- Science – Grad Dip
- HRM – Post Grad
- Professional Engineer
- Architect
- Education - Bch
- Social Science - Ba
- Security Science – Grad Certificate (ECU)
- Security Science – Msc (ECU)
- Administration Studies – Adv Dip
- Electrical Engineer – Ba Sc
- Administration - Ma
- Security Science – Ba Sc

- Social Science – Ba
- Business - Ba
- Fraud - Diploma
- Accounting - Diploma
- Administration - Diploma
- Information Management – Ass Diploma
- Investigation - Diploma
- Medical Technology - Diploma
- Disaster Management – Ass Diploma
- Geography - Bch
- Security OPS – Adv Cert
- Counter Surveillance – Adv Cert
- Security Science – Certificate (ECU)
- Security Science – Certificate (ECU)
- Risk Management – Grad Certificate
- Police Science - Diploma
- Police Management – Graduate Studies

No: 6 participants did not hold a formal qualification

3 participants said they would pursue a formal qualification;

- Possibly CPP or part time Bsc Security (ECU)
- I would seek a formal qualification at ECU
- Yes, I would, I think it is essential to back up acquired skills to recognise prior learning and knowledge

The remainder were unsure or did not believe it was necessary;

- Depends on what you mean by formal, I don't have tertiary qualifications and I don't feel that I need tertiary qualifications given my background and experience. My background is in Junior and Senior Policing at management level with 20 years specialising in health care security
- Career Development Courses
- While I am enjoying what I do there is no guarantee I will be doing this job in the future

Question Five: Should Security Managers be tertiary qualified?

Yes: What tertiary qualifications are suitable?

No: What qualifications would be beneficial?

Yes: 13 participants believed that Security Managers should be tertiary qualified.

Listed below are the various tertiary qualifications that would be suitable as identified by the participants

- Commerce, IT, Risk Management, broad mix
- Minimum undergraduate, 10 years for a Masters, Bch Business, management, HRM, risk management, Occupational Health & Safety, Grad Certificate in Security
- Broad Qualification in Security, Bch in Management
- Depending on field of security, security, management, psychology, IT
- Any Ba or Bachelor of Science with units in security and other disciplines
- Security Science, risk, engineering
- Diploma in security management, risk management, communication, training and Development
- Depending on job level, Bch for Frontline, graduate qualification for middle management and postgraduate for senior management. If no qualification in security then need a bridging course ie. short courses
- To assist in raising profile of industry and gaining credibility at a sufficiently high level in an organisation.

No: 8 participants believed that Security Managers do not need to be tertiary qualified.

Listed below are their responses

- Not necessary. A lot of experience gained from background in related security organisation
- Not a necessity to be tertiary qualified, on the job training is sufficient
- Leading that way for all types of managers
- TAFE or VOCED or practical experience, professional courses in industry
- Will be in the future – Human Behaviour, Occupational Health and Safety, commerce, property management
- Would be an advantage, there are people out there don't discount those without – ECU course is practical
- A lot of personnel that have been involved in security aspects have done so by default, some are better than others and some of standard would sort out those who are not
- Not necessary, management skills are probably more important than security skills

Other: 7 participants did not state yes or no, some were undecided while others had different responses.

- It is more important to hold industry qualification in a chosen field
- Consultants yes, currently they have to pass a licensing test. It's new for security management. Tertiary qualifications with practical experience is needed
- Not necessarily – tertiary qualification only shows that a person has the ability to study, it does make a competent manager. It would be an advantage if combined with experience, but not essential
- Depends on what aspect you want from that person, consultants – yes, recognise experience, for people getting involved now definitely. To manage security doesn't need formal qualification but to consult you do. Know who to contact and where to draw special information
- Tertiary qualification are not automatic
- Will become the norm – accounting electronics, HRM
- Yes, but there are ways of gathering the same knowledge. Behavioural competencies are important. Because of the broad nature of security operations and their social impact a range of specialities may be suitable – Bsc physics, chemistry, geography, social science, electronics, law

The most suitable qualification as identified by participants are listed below,
Security (4), risk management (3), management (3), commerce (3), HRM (2), OCH & S (2), psychology (2), IT (2), any Ba or Bch (2), electronics (2), the ECU course, property management, training and development, communication, law, ethics, geography, chemistry, physics, accounting, risk, engineering, social science

Question Six: Does the security industry need a formal qualification program?

Yes: To what level?

No: What does the industry require?

Yes: All 30 participants said yes.

Listed below are the qualification levels and the comments made by participants;
Degree level (8), degree in security (3), same as ECU, diploma / adv diploma (2), licensing (2), new person people starting out (2), professional development, service providers, self regulatory, masters not necessary, CPP

- Degree in security aids in further on the job training for new employees
- There are too many gun hoe ex police / military
- Degree level, but not recognise the generic skill rather than the specific knowledge
- Base qualifications, management issues, electives for specific areas
- Multiple pathways for school leavers, industry, ex military, generalist and specialist
- Depends on job level Bch for frontline, graduate qualification for middle and postgraduate for senior level
- The security industry (managers and consultants) should have a university education
- Need for it, first step Bch
- Especially service providers, security management in other industries not necessary
- Relevant regulation and licensing. The security industry in Australia is in dire need of rehabilitating its image. This can be assisted by recognised qualifications
- The whole industry needs formal framework and licensing
- For industry's sake
- For alarm installers before license are issued, consultants, however existing people have experience, unfair to say they are not qualified because they have no formal qualifications
- Get rid of the dregs in the industry
- Diploma for security skills combine with tertiary qualifications for higher management
- Tertiary and professional development program
- Ensure professionalism, not necessarily a degree program
- Formal training program particularly for people entering the industry with no experience. The level of training will depend on what level the person is going to operate at
- On the job training to obtain the practical skills
- Formal process is required to ensure the same level of ability, skill and knowledge is held by security professionals. All aspects of security positions to be assessed and then a license to be issued
- It wouldn't hurt. The growing concern for individual and collective security, combined with improved technologies and the inter connected nature of the security issues with social well being, economy and national security requires a much broader understanding of the issues. There are may be a distinct difference between practitioners and managers.

Question Seven: How would such a course be beneficial?

The following are the responses from participants and their comments;

Increased professionalism (4), raise awareness of industry to professional standard (2), improve standard (2), recognition, remuneration, consistency, uniformity within industry, improve reputation, set a benchmark, improve communications, people friendly, increase ethical standards, fill the knowledge and skills gap, improve productivity, ensure best practice, ensure standard service, credibility, increase in skill level, improve consulting, clean up industry, provide a quality service, broaden knowledge, standard competencies, formal qualification before licensing

- Too many witch doctors
- Raise professional profile from backyard alarm installers to corporate fraud investigation
- The course would provide students with a solid foundation of theory and knowledge on which to build their career
- It's good for industry because unqualified will not get work
- Credibility – Like police and military it's assumed that they have credibility and suite the job
- Increase professional knowledge and skills - hopefully increase in pay. Develop standing in professional community
- Within industry it needs to increase technical knowledge, less background boys
- Exposure of a host of areas in security management and science for the practitioner. Puts security manager on par with other managers. Gives an identity, takes away from the old ex cop or military failure, improve the perception of security profile for guards and function.
- Have a good background/understanding on which to train
- One would hope that it would produce a more professional employee
- Allowing aspiring Security Managers to acquire knowledge not easily attainable elsewhere and to establish and sustain the excellence concept in the Australian Security Industry
- Occurrence of people being educated and trained by experts
- For Security Managers the course may give them a broader understanding of the issues relating to security operation. Security is a social issue relating to individual and economic security as such Security Managers have a fiduciary responsibility to clients and a broader responsibility to the economy as a whole. Formal training will improve the delivery and purpose of security services
- Basic standard qualification across the industry is a starting point
- Eliminating unethical fly by night operators, providing a recognised standard for all security operators and staff. A professional industry through quality trained people with formal qualification operation. skills

Question Eight: To whom should such a course need to be developed for? (Ie) school leavers, security practitioners, other industries?

What levels of tertiary study would you consider necessary? (Eg) Bachelor / Masters / Doctoral?

To whom:

- a) 3 - School leavers
- b) 11 - School leavers and security practitioners
- c) 9 - Security practitioners (not school leavers)
- d) 6 - Generalised response
- e) 1 - No response

To what level?

- 1) 14 – All levels (TAFE to Uni)
- 2) 9 – To a Bachelor level
- 3) 2 – To a Masters level
- 4) Various responses - In future a Doctorate
 - Master and Doctorate after industry experience
 - Practical experience
 - Practical course to any level
 - Masters for a specific field

a) School leavers

- There is no industry focus or qualification that is understood
- Changing attitudes of people in industry
- Structured for young people needing training

b) School leavers and security practitioners

- School leavers for knowledge and current path, security practitioners for development of skills
- Both school leavers and security practitioners
- Security practitioners, school leavers for consulting and new problem solving skills. There is room for both
- All levels of entry for the industry. Therefore need different level courses and qualification (use of AQF). Doctoral more for research and policy roles including academic
- Multiple pathways - school leaver, industry, ex military / cops and academics

- It can be aimed at current security practitioners and people who are starting off in the private security industry, at an assistant level. Bachelor would be sufficient, perhaps once a security manager level has been reached, it may be relevant to obtain a Masters in a specific field
- School leavers and existing practitioners, to capture the late developer. Other industries may obtain personal benefit but the course should not be designed for them. Bachelor as a minimum, doctorates are always impressive.
- Depending on circumstances, the sky's the limit, probably depending on the scale and potential impact of the security operation
- School leavers and practitioners. Depends on the individual's intention within the industry. As a manager a diploma would be sufficient. If the individual was employed to access a number of disciplines then a bachelor. If the individual was to go into product development then a higher degree is necessary
- All persons wishing to enter the security industry, school leavers, security practitioners, industry companies wishing to operate a security business
- **c) Security practitioners (not school leavers)**
- It isn't appropriate for school leavers; it is a mature age person's vocation because of the role these frontline people are faced with. Level – practical experience
- Security practitioners, level – doctoral, depends what industry to what level
- Security practitioners and other industries, the life experience of many school leavers is too limited for such an industry. A practical course to any level
- Different horses for different courses, specific training. Security practitioners need specialised courses (ie) retail. Security is too specialised for school leavers
- Security practitioners and other industries, security in itself is not enough to employ a specialist. Industry needs education bachelor as a minimum
- Security practitioners, people with transferable skills, people from all areas, horses for courses
- Security officer (managers)
- Security practitioners, graduates of other tertiary studies

d) Generalised response

- Designed for security practice and commerce, to elevate status level in organisation
- All levels, TAFE courses to university

- I consider it should be designed for persons wanting to enter the security industry taking into account at what level they wish to enter and the specific needs of what area of the industry they wish to work in.
- Unable to answer the question 'What level of tertiary study is necessary?' It depends on what level the person wanted to work at (ie) the security manager for Qantas may have a higher degree than the manager of a retail security operation
- Necessary for practitioners down the track
- Can not remove people already in industry with specialist experience without formal qualification. Categories with type of job function. What is the degree trying to achieve? Creating to over qualified. Make subject specific to task
- Technical skills for school leavers, must practice on the job. A small security industry (who you know). Practical experience start own business. Bachelor with real experience for industry, what would you do with a Masters?

e) **No response:** One participant had no response.

Question Nine: What content would you recommend for a security course?

Risk management (10), law (9), physical security (8), occupational health and safety (7), psychology and human behaviour (6), management (6), investigation (5), technology (4), electronics (4), training (4), IT security (4), as per Edith Cowan University course with hands on experience (4), security technology (3), commerce and business (3), personal security (3), surveillance (3), architecture (2), legislative (2), BCP (2), HRM (2), CPTED (2), risk (2), fraud (2), ethics (2), interviewing (2), first aid (2), technical (2)

Engineering, electrical engineering, CCTV, government issues, industrial relations, crime detection, product knowledge, marketing, DRP, budgeting, security awareness, computer skills, written and oral reports, relevant project work, lectures from within the profession, information security, project management, intelligence, threats, security industry, drafting, vetting, conflict resolution, facility management, communication security, project security, operation security

- The current Edith Cowan University Bachelors of Security Science degree is fine, but there needs to be compulsory work experience with participation industries (such as internship in the second semester of 2nd year)
- 75% physical security theory, practice and law. 25% fraud or related subjects

- Should be some practical as well as theory. For industry a psychology test would improve employment process
- Make course specific to what is relevant, design course to specific areas, for example short course at Edith Cowan University

Question Ten: Would you employ a graduate with a security qualification?

Yes: What level in the organisation and what role?

No: For what reason? Could these reasons be overcome and how?

Yes - 23: Entry level (7), assistant manager (4), graduate program (2), manager, where necessary, entry level manager, trainee management, middle management.

- Graduate level
- Depends on knowledge, years out of university, analysis, fraud
- Co-ordinator to manager as a manager
- Lower level, assistant for developing into senior role
- Ideally start midstream depending on structure of organisation and past experience
- Consultative work / assistant manager
- Where necessary
- Entry level commensurate with abilities
- Entry level a fresh perspective
- Entry level management, with professional development program
- Their experience, junior, on the job training
- Depends on experience a security professional manager would need to have at least 3 years for that position. Otherwise graduate would need to have at least 3 years for that position. Otherwise graduate would have to gain experience as a security officer type position.
- Entry level – site specific
- Lower level – specific skills for this industry
- When the occasion demands it, as a management trainer, supervising consultants, gaining business by addressing seminars and meeting prospective / existing clients
- If it was necessary and available
- Initially middle man / adviser
- Depends on individual, start at base level
- Assistant manager
- Difficult to say in the public service, graduate program style

- Formal qualification would be very beneficial to any employer, to promote their business and in tendering for new work
- Probably as an officer through officer training or as a security professional to supplement or contribute to our current expertise, or as an internal consultant. The complex of security issues in today's world means that we don't have anyone with a complete overview of all issues. I don't believe our current course covers the full range of requirements for a well-rounded security manager. We get around this by pooling experience.

No Response: 3

- Don't know
- Not relevant to my current position
- No answer

No: 2

- It would be a waste of the graduates time and effort in gaining the qualification to employ them as a security officer. Although having said that it would probably give them some valuable practical experience
- Not for this organisation

Yes and No: 2

- Depends on situation, current environment - no, consulting area – yes
- I don't think the pure fact the person is a graduate necessarily means he can do the job; it shows he has the ability to study. If I felt they could do the job with or without a degree I would employ them. I believe that a person with a degree would then have to get the practical hands on experience before they become an effective security manager. You can't learn it all out of a book. The school of experience combined with formal qualification would be needed. There may also be people with extensive experience but no degree who could do the job well if not better

Question Eleven: How would you provide a graduate with practical development experience?

1. On the job training (7)
2. Formal graduate development programs (2)
3. Industry contact and networking (2)
4. Small tasks, building on tasks and responsibility (2)

5. In house courses(1)
 6. Throw them in the deep end / same induction as everyone else (1)
- Balance work program, on the job training
 - If a graduate had no experience provide that graduate with industry contacts to learn practical and necessary skills
 - First 6 months – experience program (Institution structure and policing and process, find out the situation)
 - Forming part of a team
 - On the job training , in house courses, external education relevant to position
 - They would have to work for a number of years, say a minimum of 5 – 7 years, in different aspects of the industry
 - On the job - know the business first
 - Go on exchange programs with other institutions, provide available resources and short courses
 - Teach, on the job
 - Workshop and training courses, keep in contact with industry, network conferences
 - My current consulting work doesn't allow for work experience, but would assign an architecture, practical small project task
 - Go out on the job, specific training for each area
 - Programme to cover skills for security management including both security and management issues, certificate level 4 approach to basic skills
 - Their experience, junior on the job training, formal graduate development program
 - An assistant to the security manager / consultant
 - Involvement with conducting investigation resolving crime / segment to a lot of different organisations
 - Breakdown components 3 months blocks
 - Lower level (frontline) on the floor - build up skills – street credibility
 - Gaining supervised on the job training, requiring membership of relevant industry association
Base knowledge of organisation, building on broad introduction, increase to more specialised jobs
 - Small tasks, give them to an experienced consultant, learn dollars not marks out of 10 for academic work
 - Practical of security programs gradually hand over facility
 - Not actual graduate training, the same induction training for all
 - Throw in the deep end, same as anybody else employed in the organisation

- Security measures are threat drivers. The greater the perceived or real threat, the greater the finding people will make available for security improvements. Because threats to our organisations have been low to date (excluding East Timor and emerging threats) we would often employ such an expert to write reports / review situations which probably wouldn't be actioned. We would get them other practical experiences through exercise and training courses
- Workplace training in a security industry
- Relate through the different aspects of the security business
- Partner with a security professional
- Through a traineeship or cadetship with a reputable licensed security provider. Practical sessions should be incorporated into their tertiary courses, for assessment by industry assessors

Question Twelve: Does the security industry need tertiary qualified security practitioners?

Western Australia / Eastern States / National?

What type of work would those practitioners perform?

Yes: 21

- Would be beneficial
- Nationally – more industry participation
- There must be a benchmark to be able to be a recognised profession
- To maintain professionalism, standard for applying for position throughout the country
- Nationally
- National requirements
- Lift the bouncer image
- The industry is full of personal companies and insufficient work at present
- Consulting needs attention, need good job information
- Everywhere for consulting and management
- General Security Managers to specialists
- Tertiary qualified security practitioners are required nationally
- There are many people working in the industry that have the physical skills and not the technical skills. The role would fill the current breach that has opened up between organisations and the police force
- Undoubtedly as described

- Consultants – yes, management need industry and organisational courses to stay in touch and be able to relate and work with consultants, use specialists for specific tasks
- Industry needs it for profile
- National – standard practices for all states, and qualification
- For consulting security advise to government
- National uniformed licensing procedures and formal qualifications allowing portability of employees licenses

Not specific: 7 participants

- Not necessarily – depends on what level and what aspect of the industry the practitioner wants to work. Senior management is a large organisation, train and supervise
- A manager is a manager in any industry
- Not feasible at current, in 10 years a good core of competent people
- The Eastern States are more qualified, there are more Eastern States managers (head offices)
- Doesn't need, would be advantageous, in the future it will need
- I would call a degree qualified person a security manager not a practitioner. There would be a market for some one who can provide cost effective and appropriate security solution they would perform
 - Threat and risk assessment, resource assessment and costing
 - Risk reduction plans
 - Planning security
 - Vulnerability
 - Risk management planning

No response: 2 Participants had no response

What type of work?

- Management identified by 5 participants
- Consultants identified by 3 participants
- Managing security operation identified by 2 participants

Other description:

- Managing and coordinating the institutions protective resources
- Planning for management of risks in organisations
- Administration to managing director

- Security advise to government
- Development of government and industrial physical and electronic security for organisation
- Risk management – industrial, educational, medical, IT, project management
- Specialty advisers
- Threat and risk assessments, risk reduction, planning security vulnerability assessment

Question Thirteen: Is security a profession?

Yes: What makes it a profession?

No: How could security establish itself as a profession?

Yes: 17 participants said 'yes' - What makes a profession?

- Risk management (in a broad context) is a better term
- You must know your business
- Security is an important aspect of the organisation, ensuring operational achievements and survival
- Yes I think it is a profession or an industry / vocation. I am unable to say what makes a profession
- Yes – since 1976 a professional security consulting need. There is a need for professional security (breaking away from other disciplines in management and engineering)
- Like in all areas one can be professional
- Need specific training, future liability issues, there is no Australian Standard for general security
- Yes, but some people are not, an industry body and a learned society (ensure the integrity of the profession)
- The complexity involved
- Specialised – broad for different areas. Security industry – security for other industries
- Management is the same everywhere, security is a specialist area 'uniqueness'
- Quality of work, similarities with other professions (ie) technology. Its importance to organisations to protect confidential information – the skill involved
- As I have said before, the complexity and diversity of the modern world. Provisions of effective and affordable security are important. Yes it is breadth of knowledge and a fiduciary responsibility
- Professional attitude and approach, high degree of knowledge in respective law and legal requirements, systems and components

- Good sound education and a professional body. The wider community needs to understand that security is not just guarding

No: 5 participants said 'no' – How could security establish itself as a profession?

- No uniformity, no consistency, no institutional
- No, not yet, educational profile available, industry needs to use that profile and industry body needs to promote
- No, need to develop common body of knowledge, need to develop greater autonomy and enforcement of ethics
- No, not yet in Australia, relevant licensing, regulation and removal of cowboys

No response: 2 participants did not respond

Yes and No: 6 participants said 'yes' and 'no' or 'nearly'

- Nearly a profession
- I think it is well on its way to becoming a profession but I think it needs to be streamlined. There are a lot of different aspects of security
- For corporate security management / consultants. There needs to be a clearer definition of the term 'security manager / security consultant'. Alarm installer or management the scope is to be broad
- Security positions such as management roles are a profession, but they are not recognised as an academic profession but rather a profession which is gained through experience
- It's got to become a profession. Trying to be professional the industry has too many cowboys, needs standards and legislation
- Yes and no 50/50
- Is a profession coupled with qualified / tertiary trained employees
- To establish security as a profession, formal qualification should be mandatory for all staff and employing companies