AUSTRALIA’S EMERGENCY MANAGERS – TOWARDS PROFESSIONALISATION

DUDLEY FRANCIS McARDLE CSC, BA

A thesis submitted in partial fulfilment of the requirements for the degree of Master of Philosophy at Monash University in 2017

Monash University Accident Research Centre Disaster Resilience Initiative
COPYRIGHT NOTICE

© Dudley Francis McArdle 2017

I certify that I have not knowingly added copyright content to my work without the author’s permission.
DECLARATION
This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed ............................................................................

DUDLEY McARDLE

25 September 2017

The research for this project has received the approvals of the Monash University Standing Committee for Ethical Research on Humans (2016-7302-7131 of 4 December 2016 and 2017-7965-8134 of 2 February 2017).
ABSTRACT

There has been an increasing use of the term ‘profession’ to describe those Australians who carry out emergency management activities. They are often described, by themselves and by others, as ‘professionals’. This paper examines who these emergency managers are, and challenges whether they qualify to belong to a ‘profession’.

Little is known or documented about Australia’s emergency managers – who they are, what are their skills and qualifications and what experience they bring to their duties. Further, the sector labours under a burden of confusion and uncertainty regarding such basic terminology as ‘disaster’, ‘emergency’ and ‘emergency manager’. While it would appear to be self-evident that adoption of agreed definitions of these core terms would be a first step towards defining an emergency management profession, there is little evidence of efforts to achieve such uniformity, let alone other steps towards establishing such a profession or defining what it might look like.

To begin to cast some light on these issues, I conducted a review of relevant literature, both peer-reviewed and grey literature. I gathered data by surveying emergency managers regarding their demographic profiles and their attitudes and knowledge regarding professionalisation of their sector. I also conducted semi-structured interviews with a representative sample to gain further insight into some of the issues arising from the survey. My analysis of this data enabled me to make some judgements about the journey of Australian emergency managers towards possible professionalisation.

859 emergency managers contributed to the data-gathering. The data highlights that Australia’s emergency managers are a wildly heterogeneous group. There is no common profile in terms of age, gender, background, expertise, skills or experience. Within the sector, there is no clear career path, no clearly defined standard training or education pathways for them to follow, no universal standards of performance and no generally accepted certification or entry-test to qualify an emergency manager as a professional.

Australia’s emergency managers generally believe that the creation and maintenance of a profession would be a ‘good thing’. There is a general understanding of the essential characteristics of an emergency management profession but there is no agreement as to who might qualify for membership, what it might look like, how it might operate or how or by whom it might be established.

This thesis concludes that Australia is not yet in a position to establish an emergency management profession. It makes recommendations suggesting what steps could be taken in the short- and long-term to facilitate the establishment of an EM profession. Recognising that this unique research has only scratched the surface of the issues discussed, it identifies further research needed to help inform the journey towards the professionalisation of the emergency management sector.
ACKNOWLEDGEMENTS

Like many others, I came to emergency management as a third career. I had been a high school teacher and then an Officer in the Royal Australian Air Force over a 32 year period. After 12 further years as a full-time emergency manager, I became a ‘semi-retiree’ — working as a consultant. It’s in this ‘fourth’ career that I have been able to devote time and effort into thinking about and researching what emergency management is really all about.

Emeritus Professor Frank Archer, head of the Monash University Disaster Resilience Initiative (MUDRI) at the Monash University Accident Research Centre (MUARC), inveigled me into joining him and his team. I accepted his invitation for a number of reasons:

• I wanted to keep doing emergency management, but not in a corporate role;
• I wanted to help other (particularly younger) emergency managers get as much satisfaction and enjoyment out of their practice as I had;
• I wanted to find a way of ‘giving back’ some of the learnings and experience I had been privileged to acquire over the years;
• I had always railed against the fact that emergency managers in general did not read and did not write about their practice and I hoped working with Monash would give me a platform to attempt to turn that around;
• I decried the fact that ours was generally not a sector that valued evidence-based policy and decisions - in fact there was even a whiff of anti-intellectualism in our ranks.

It was while working with Frank and the team that I decided to enrol in MUDRI’s research Masters program.

I needed a Masters degree at that stage of my career(s) ‘like I needed a hole in the head’. But I saw it as a vehicle for satisfying those burning causes that I espoused. I could put my money, time and effort ‘where my mouth was’.

And it was so. The past four years of part-time study and research have enabled me to address all of those items on my ‘wish-list’.

Like all part-time students and like all ‘late-vocation’ students, I struggled with problems of time allocation, competing priorities and with getting a handle on academic and study practices unfamiliar to most corporate people. I could not have succeeded without the sensitive, supportive, personalised, comprehensive support provided by my supervisors. Emeritus Professor Frank Archer, Dr Caroline Spencer and Professor ‘Skip’ Burkle lavished me with the perfect mix of tough love, insightful questioning and relentless encouragement. Their collective guidance and support for an ageing, ‘late-career’ emergency manager who knew and appreciated little about the academic world were without peer. The credit for any success I have achieved in my endeavours lies squarely at their feet. I take great pride in calling them my friends.

The other group of friends I have collected along the way are my ‘partners in crime’ – those hardy characters who joined me in the first cohort of MUDRI Masters students. The
camaraderie and mutual support shared with me by Adam Poulter, John Coleman, Kate White, Craig Ferguson and the late, lamented Claire Zara were a huge bonus and provided lots of opportunities for mutual shoulder-crying when I needed it most. Similarly, later ‘recruits’, including Fiona Roberts, Diana Wong, Joe Cuthbertson, Susan Davie, Suresh Pokarel, Roger Jones, Janne Bowen, Mark Potter, Matt Pepper, Frances Haire-Taylor, Bianca Oldstein, Joanne Briggs, Heather Moody, Saadia Majeed and Deb Parkinson (not to forget the long-suffering Samantha Bailey who guided me through the machinations of the Monash bureaucracy) all provided a ready-made bank of help and support when it all seemed too hard. I also acknowledge the support of Professor Rod McClure, Director of MUARC when I started my journey, of Associate Professor Jenny Oxley, MUARC’s Associate Director of Graduate Research, and our current Director, Professor Judith Charlton.

I offer my thanks to those busy emergency managers who gave of their precious time to contribute to my research by completing my survey and by participating in my interviews.

I am also grateful to the literally hundreds of emergency managers – the great and the small! – from whom I learned so much and with whom I have had such enjoyable, inspirational and rewarding experiences over the years. Without exception, it has been my observation that not one person goes into this sector without the most honest and heartfelt wish to help their community. It is without doubt the most generous, most giving and most charitable collection of people, dedicated to making their communities safer and more resilient. I take my hat off to them all, volunteers and paid staff alike, responders, recoverers, planners, mitigators, community workers, communicators and support staff and wish them good fortune in their continuing endeavours.

I acknowledge the Australian Government’s support in my research through an Australian Government Research Training Program Scholarship.
DEDICATION

I pay homage to my mother Valerie McArdle who led the way for my academic sortie by being awarded her Bachelor’s degree at the age of 65. She always encouraged her children to seek knowledge and to improve themselves and provided a wonderful, nurturing, joy-filled home environment for all five of us as we grew up. That strong sense of family is epitomised by our sister Dr Felicity McArdle who as an Associate Professor at the Queensland University of Technology gleefully took on the role of self-appointed FOURTH supervisor for this work – in spite of my best efforts to ignore her every time she asked me ‘How much have you written today??’!

Finally, I save my strongest thanks and appreciation for my friend, helpmate and partner for nearly 50 years, my wife Cheryl. She has always supported me in all my endeavours, sometimes to the detriment of her own career and opportunities. She exhibits a fortitude under the adversity that afflicts her that I could only hope to aspire to. She has been my support, my corroborator, my comfort in everything from raising our children to setting up households in some very out-of-the-way places around the world. This project has been no different, and once again, she has my undying love and gratitude. I dedicate this work to her.
# TABLE OF CONTENTS

*Title Page*  
*Copyright Notice*  
*Declaration*  
*Abstract*  
*Acknowledgements*  
*Dedication*  
*Table of Contents*  
*List of Tables*  
*List of Figures*  
*Glossary*  
*Prolegomenon*  

## CHAPTER 1  INTRODUCTION  
1.1 Background  
1.2 Problem Statement  
1.3 Purpose of the Study  
1.4 Initial Research Question  
1.5 Significance of This Study  
1.6 Structure of the Thesis  

## CHAPTER 2  LITERATURE REVIEW  
2.1 Literature Review Questions  
2.2 Search Strategy  
2.2.1 Peer-Reviewed Literature  
2.2.2 Grey Literature  
2.2.3 Hand-Search of Relevant Journals  
2.2.4 Secondary Search  
2.2.5 Inclusion Criteria  
2.3 Results of Literature Review  
2.4 Findings from Literature Review
CHAPTER 4 RESULTS

4.1 Results

4.2 Survey Results

4.2.1 Gender
4.2.2 Age
4.2.3 Place of Work
4.2.4 Area of EM Employment
4.2.5 Type of Organisation
4.2.6 Education Qualifications
4.2.7 Highest Level of EM Qualification
4.2.8 How Important Is a More Advanced EM Qualification?
4.2.9 Official Title
4.2.10 Type of Employment
4.2.11 Type of Jurisdiction
4.2.12 Salary
4.2.13 Number of Years in EM
4.2.14 Years in Current Position
4.2.15 Shared Responsibility
4.2.16 EM As First Field of Work
4.2.17 First Field of Work
4.2.18 Other EM Activities
4.2.19 Emergency Management Certifications
4.2.20 EM Training
4.2.21 General Level of Formal Education
4.2.22 Level of EM Education
4.2.23 Level of EM Training (eg In-House)
4.2.24 Level of EM Experience
4.2.25 Role of Formal General Education
4.2.26 Role of Formal EM Education
Attachment 3  Survey Documentation and Questions  
Attachment 4  Interview Documentation and Questions
LIST OF TABLES

Table 1  Organisational Contacts for Survey Distribution
Table 2  Area of EM Employment
Table 3  Official Title
Table 4  Number of Years in EM
Table 5  Number of Years in Current Position
Table 6  Percentage of Time Spent in Non-EM Roles
Table 7  Other Responsibilities
Table 8  Pre-EM Careers
Table 9  Other EM Activities
Table 10 Emergency Management Training
Table 11 Importance of Formal General Education
Table 12 Importance of Formal EM Education
Table 13 Importance of EM Training
Table 14 Importance of EM Experience
Table 15 Relevance of Formal General Education
Table 16 Relevance of Formal EM Education
Table 17 Relevance of EM Training
Table 18 Relevance of EM Experience
Table 19 Recommended EM Training
Table 20 Relevance of EM Certification
Table 21 Relative Importance of Education, Training and Experience
Table 22 Importance of Attributes of a Profession
Table 23 Importance of Further Attributes of a Profession
LIST OF FIGURES

Figure 1  Gender
Figure 2  Age
Figure 3  Place of Work
Figure 4  Type of Organisation
Figure 5  Education Qualifications
Figure 6  Highest Level of EM Qualification
Figure 7  Importance of a Higher Level of EM Qualification
Figure 8  Type of Employment
Figure 9  Type of Jurisdiction
Figure 10  Salary
Figure 11  Shared Responsibility
Figure 12  EM as First Field of Work
Figure 13  EM Certifications
Figure 14  Level of Formal Education
Figure 15  Level of EM Education
Figure 16  Level of EM Training
Figure 17  Level of EM Experience
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>AFAC</td>
<td>Australasian Fire and Emergency Services Authorities Council</td>
</tr>
<tr>
<td>AEMI</td>
<td>Australian Emergency Management Institute</td>
</tr>
<tr>
<td>AIES</td>
<td>Australian Institute of Emergency Services</td>
</tr>
<tr>
<td>AIIMS</td>
<td>Australian Inter-service Incident Management System</td>
</tr>
<tr>
<td>ASCO</td>
<td>Australian Standard Classification of Occupations</td>
</tr>
<tr>
<td>CFA</td>
<td>Country Fire Authority (Victoria)</td>
</tr>
<tr>
<td>COAG</td>
<td>Council of Australian Governments</td>
</tr>
<tr>
<td>CRC</td>
<td>Cooperative Research Centre</td>
</tr>
<tr>
<td>DEDJTR</td>
<td>Department of Economic Development, Jobs, Transport and Resources (Victoria)</td>
</tr>
<tr>
<td>DELWP</td>
<td>Department of Environment, Land, Water and Planning (Victoria)</td>
</tr>
<tr>
<td>DHS</td>
<td>Department of Homeland Security (USA)</td>
</tr>
<tr>
<td>DHHS</td>
<td>Department of Human Services (Victoria)</td>
</tr>
<tr>
<td>DPC</td>
<td>Department of Premier &amp; Cabinet (Victoria)</td>
</tr>
<tr>
<td>ELRHA</td>
<td>Enhancing Learning &amp; Research for Humanitarian Assistance</td>
</tr>
<tr>
<td>EM</td>
<td>Emergency Management</td>
</tr>
<tr>
<td>EMPS</td>
<td>Emergency Management Professionalisation Scheme (AFAC)</td>
</tr>
<tr>
<td>EMs</td>
<td>Emergency Managers</td>
</tr>
<tr>
<td>EMA</td>
<td>Emergency Management Australia</td>
</tr>
<tr>
<td>EMV</td>
<td>Emergency Management Victoria</td>
</tr>
<tr>
<td>ESTA</td>
<td>Emergency Services Telecommunications Authority</td>
</tr>
<tr>
<td>FEMA</td>
<td>Federal Emergency Management Authority</td>
</tr>
<tr>
<td>IAEM</td>
<td>International Association of Emergency Managers</td>
</tr>
<tr>
<td>IASC</td>
<td>Inter-Agency Standing Committee</td>
</tr>
<tr>
<td>IFRCRCS</td>
<td>International Federation of Red Cross and Red Crescent Societies</td>
</tr>
<tr>
<td>MAV</td>
<td>Municipal Association of Victoria</td>
</tr>
<tr>
<td>MFB</td>
<td>Metropolitan Fire Board (Victoria)</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>MUARC</td>
<td>Monash University Accident Research Centre</td>
</tr>
<tr>
<td>MUDRI</td>
<td>Monash University Disaster Resilience Initiative</td>
</tr>
<tr>
<td>MUHREC</td>
<td>Monash University Human Research Ethics Committee</td>
</tr>
<tr>
<td>NASA</td>
<td>North American Space Administration</td>
</tr>
<tr>
<td>NFP</td>
<td>Not-For-Profit</td>
</tr>
<tr>
<td>NFPA</td>
<td>National Fire Protection Association</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Government Organisation</td>
</tr>
<tr>
<td>NRAS</td>
<td>National Registration and Accreditation Scheme</td>
</tr>
<tr>
<td>PAATCHH</td>
<td>Professional Association of Academic Training Centers in Humanitarian Health</td>
</tr>
<tr>
<td>PAHO</td>
<td>Pan American Health Organisation</td>
</tr>
<tr>
<td>SES</td>
<td>State Emergency Service (Victoria)</td>
</tr>
<tr>
<td>TEQSA</td>
<td>Tertiary Education Quality and Standards Agency</td>
</tr>
<tr>
<td>UNDHA</td>
<td>United Nations Department of Humanitarian Affairs</td>
</tr>
<tr>
<td>UNISDR</td>
<td>United Nations International Strategy for Disaster Reduction</td>
</tr>
<tr>
<td>UNOCHA</td>
<td>United Nations Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>VICPOL</td>
<td>Victoria Police</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
</tbody>
</table>
Autoethnography is a form of self-reflection and writing that explores a researcher’s personal experience and connects this autobiographical story to wider cultural, political and social meanings and understandings. Autoethnographers recognise the innumerable ways by which personal experience influences the research process. For instance, a researcher decides who, what, when, where and how to research. These decisions are necessarily tied to institutional requirements, resources, and personal circumstance. It is one of the approaches that acknowledges and accommodates subjectivity, emotionality, and the researcher’s influence on research, rather than hiding from these matters or assuming they don’t exist (Anderson 2006; Ellis, Adams & Bochner 2011).

Although by no means describing myself as an autoethnographer, I am very conscious that my personal experience and my career as an emergency manager in particular have had some effect on how and why I have gone about this research.

This Prolegomenon aims to identify and ‘bring out in the open’ some of those formative experiences.

I have come to this endeavour as a ‘mature-age’ researcher. I have enjoyed a number of vocations, all of which have helped shape my approach to this topic. My first career was as a High School teacher. I then served in the Royal Australian Air Force, retiring after 28 years as a senior officer following numerous roles and geographic postings in Australia and overseas.

My ‘real’ emergency management career began with me being appointed as Director of the Australian Emergency Management Institute (AEMI), the Federal Government’s national emergency management education and training institution. I was also appointed as a Director of Emergency Management Australia (EMA), the Australian Government’s emergency management agency (similar to the Federal Emergency Management Agency (FEMA) in the USA).

While serving in this position, in an environment which encouraged thinking and inquiry about current issues, I first became absorbed in my ‘new’ vocation. It became apparent that there was potential for emergency managers to be seen as professionals. In fact I presented a couple of papers to conferences and workshops on the topic.

My next appointment was to establish the Emergency Management Directorate of the Victorian Government’s Department of Human Services (DHS) incorporating the Department of Health. In these positions I served on a number of peak Australian State and National health and emergency management committees including the Australian Health Protection Committee, the Victorian Emergency Management Council and the Victorian Central Government Response Committee. It was in the ‘rarefied’ atmosphere of serving on these and other committees and forums that I noted that while other professions clearly

---

1 Prefatory remarks; specifically: a formal essay or critical discussion serving to introduce and interpret an extended work. [https://www.merriam-webster.com/dictionary/prolegomenon](https://www.merriam-webster.com/dictionary/prolegomenon)
had a recognised, sought-after and authoritative place at the table of decision makers, emergency managers were not treated with the same gravitas or respect.

During this time, I served in a number of corporate positions: Chairman of the Board, Centre for Risk and Community Safety Research, Royal Melbourne Institute of Technology; Board Member (and Chairman, Finance Committee), National Public Safety Industry Training Advisory Board; Member, Graduate and Post-Graduate Course Advisory Board, Emergency Management Department, Charles Sturt University; Member, Stakeholders Council Bushfires Cooperative Research Centre; Member, Honorary Advisory Board, World Conference on Disaster Management, Canadian Center for Emergency Preparedness; and Inaugural Fellow, Animal Health Australia Fellows program.

I was next recruited to work for 3 years in the Health Action in Crises Cluster of the World Health Organisation in Geneva, providing international humanitarian emergency management to communities around the world who were left with degraded health services as a consequence of disasters.

On my return from Geneva in 2010 I established my own emergency management consultancy and since then have provided emergency management consultancy services to a broad range of agencies including: the World Health Organisation in Geneva; the Federal Departments of Health and Ageing and the Attorney General; the Victorian Departments of Health and Human Services, Corrections, Emergency Management Victoria, DEDJTR, DELWP, Premier and Cabinet; all of Victoria’s Emergency Services; and the South Australian and Tasmanian Governments. I have facilitated exercises, training programs and evaluations for various State and Federal government departments and agencies. I have designed and conducted leadership programs for senior and middle-ranking emergency managers.

Over the years, I participated in a number of international humanitarian field missions including: a multinational mission to review recovery arrangements following the Gujarat, India earthquake in 2001; managed the Australian medical team in Indonesia post-tsunami in 2004; led a multiagency team assessing the health response to Cyclone Nargis, Myanmar in 2008; and twice led multiagency teams assessing the health system’s response to events in the occupied Palestinian territories (Gaza) in 2008 and 2009.

Since 2010 I have worked as the Monash University Disaster Resilience Initiative’s Emergency Management Senior Policy Advisor reviewing and contributing to their emergency management education and research programs, and providing emergency management advice and support to the Monash University Disaster Resilience Initiative (MUDRI) and to the Monash University Emergency Management Forums.

I have met, talked to and worked with hundreds of emergency managers in Australia and internationally. My personal observation is that they are without exception ‘in the business’ to help their communities. No-one joins emergency management for the money! They are universally driven by altruistic and ‘helping’ motives. But many of them have not been given the opportunity or the challenge to ‘move on’ from the tried and tested methods and attitudes from a previous time in an outdated context.
My twenty years’ experience as a practicing emergency manager has led me to a recognition that emergency managers are subject to many significant changes prompting a major shift of responsibility, expertise, knowledge-base, and a review of the capacity of the entire disaster cycle i.e. prevention, preparedness, response and recovery beyond the response phase alone.

Perhaps because I came to emergency management from another career, I feel that I have never been hide-bound by or beholden to the sector’s history and traditions, although I do respect them. I was not inculcated by the culture and attitudes that many are beginning to recognise need to change to provide the service expected by a very different, well-informed community with very high expectations. This is where I re-ignited my views of the impact, the need for, the application of the rigours of a profession to the sector. I found no agreed standards of performance, no core knowledge resource, no desire for constant improvement in methods gleaned from a study and analysis of previous events. There was no common, core set of values, no definition of the ethics, the credo, the governance of practitioners – it seems that none of these existed in any ordered way. These are the underpinnings of professionalism, and I decided to find out if my sector had them, or was ready to adopt them as the first step in what may well be a long journey towards the establishment of an Australian Association of Professional Emergency Managers.

My journey through this project has been fascinating. I approached it with some trepidation given that I had limited exposure to the world of research and to academia. I completed the requisite number of in-class and on-line units (predominantly on research and evaluation methods) and a coordinated Advanced Professional Development Program. I resolved to learn as much about this new environment as I could in the process. I have attended numerous ‘how-to’ post-graduate professional development programs. I have lectured to graduate students, conducted tutorials, marked graduate-students’ assignments, participated in and presented to research colloquia and workshops. I have listed my Advanced Professional Development Program and my reflections concerning that process at Attachment 1.

This all culminated in my undertaking the compulsory course work and production of this approximately 23,000 word thesis, to qualify for a research Masters degree.

While I still do not consider myself an academic, I am prepared to state that I now know a bit about research, about professionalisation and about what might be a way ahead for my emergency management colleagues. My wish is that this research will be the first step in a journey to strengthen the service provided to their communities by generations of emergency managers to come.
CHAPTER 1: INTRODUCTION

“I have always said that professionalism is a state of mind not a statement of income”

Anonymous survey respondent No. 22.

In this introductory Chapter I outline why I have undertaken this research and the context in which I have undertaken it. I propose the problem within Australian emergency management that I wished to resolve and what will be the benefits if it is resolved.

1.1 Background

Natural Disasters cost Australia $A9 billion in 2015 (ABR 2016). They cost the world more than $US200 billion annually (Munich Re 2016). The number and scale of disasters triggered by natural hazards are increasing (UNISDR 2016); 2016 was the hottest year ever recorded (NASA 2017).

Emergency Management (EM) involves the plans, structures and arrangements which are established to bring together the endeavours of government, voluntary and private agencies in a comprehensive and coordinated way before, during and after these disasters.

Emergency management is undergoing significant change, reflected/driven by changes in community expectations, in government structures and in our social and physical environments. Recent changes in the emphases required in emergency management include:

- Increased uncertainty, complexity and convergence of multiple events,
- Disaster Risk Reduction and policy disconnects,
- Community expectations,
- Community resilience,
- Social media, networking, and emergence of ‘big data’,
- The political/operational/policy nexus,
- Measuring emergency management effectiveness, and
- Development and Capability. (Bushfire CRC 2013).


My twenty years’ experience as a practicing emergency manager have led me to a recognition that these changes have prompted a major shift of responsibility, expertise, knowledge-base, and a review of the capacity of the entire disaster cycle (i.e. prevention, preparedness, response, recovery) beyond the response phase alone. Today, disaster risk reduction is crucial at the community level, especially in countries such as Australia, where the ‘prepared community’ concept recognizes the discreet and unique aspects of every community (Burkle 2014; Rogers 2011). Like most nations, many of these changes in
Australia’s approach to emergency management has been significantly shaped by the *Hyogo Framework for Action (HFA) 2005-2015 - Building the resilience of nations and communities to disasters* (UNISDR 2015) and, more recently, the *Sendai Framework for Disaster Risk Reduction 2015-2030* (UNISDR 2015).

The Council of Australian Governments (COAG) first responded to these drivers by publishing the “National Strategy for Disaster Resilience – Building our Nation’s Resilience to Disaster” (COAG 2011). I have previously reviewed this document and its background (McArdle, Archer 2011).

Whenever people are working with, or on, those arrangements in an all-hazard, multi-agency context whether it be before, during or after an incident or event, whether they are preparing for, mitigating against, responding to or recovering from an emergency, they are ‘doing’ emergency management. They are Emergency Managers (EMs).

Anecdotally, there are thousands of people in Australia who describe themselves as Emergency Managers. Compared with other employment categories, little is documented about who they are, what they do and what are the skills, knowledge and experience they possess to carry out their duties. Some are full-time specialists in a particular part of emergency management (Commissioners, Chief Officers, planners, ‘recoverers’, District Emergency Management Officers). Some only carry out emergency management roles part-time and are frequently seconded from their ‘real’ jobs to participate in emergency management operational roles in crises. They are vets, doctors, nurses, researchers, Shire Engineers, elected officials, emergency service personnel. I have met, talked with, worked with and argued, discussed, agreed and disagreed with many of them.

I know many emergency managers who used to be military or emergency services personnel. They are often in a second career, retired from a previous profession. Until recent times, the stereotypical emergency manager was a white, middle-aged man who started out in a different career. Frequently he wore other hats. He had minimal access to top decision-makers; he had not had much experience formulating risk or mitigation plans; he did not keep up with disaster research literature; and he was often isolated from the community he served. His job was reactive, often part-time and often underpaid and underfunded. He consistently refused or avoided learning from past experiences, past events or methods adopted by others particularly from other countries or jurisdictions and sometimes undertook some in-house or VET-level training.

Now, many are also environment workers, social workers, health workers. I have encountered a mix of entry-level, university-educated, second-career people. There are now more suits and ties, fewer response-oriented and more management-oriented people.

The changes confronting the emergency management sector have caused its members to adjust the ever-broadening range of skills, knowledge and attitudes that emergency managers need to carry out their responsibilities, and how they acquire them. In particular, we often forget that senior EM executives learned much of their business many years ago. We must recognise that, just as other practitioners need to have their skills upgraded, so do the senior decision-makers.
I have become aware of an increasing use of the term ‘profession’ to describe the body of people who carry out emergency management activities. They are increasingly described, by themselves and by others, as ‘professionals’. There is an appetite for emergency managers to see themselves and to be seen by others as professionals. I personally lament that there is little evidence of steps being taken to make that occur. Of the literally hundreds of professions listed by the Australian Bureau of Statistics, Emergency Management is not included, although interestingly, Caravan Park and Camping Ground Managers, Stock and Station Agents, Amusement Centre Managers and Tennis Coaches are! (Australian Bureau of Statistics 1997).

A popular media commentator of recent times, Waleed Aly, in speaking about his own ‘profession’ – journalism – expresses some considerations very relevant to emergency management as a profession:

“Although we think of ourselves as professionals, journalism isn’t really a profession in the traditional sense. It's not like medicine or the law. We have an ethical code of sorts, but we're not bound to it by some solemn oath. There are no induction ceremonies in which people wear ridiculous gowns or hats. There's no official body that can strike us off the roll for malpractice. And no one is suggesting there should be. The truth is that in traditional terms, we're a trade. We're pretty much self-regulated. If we stuff up, we publish a notice or an apology, maybe pay a fine if it's serious, and we move on. We lose our jobs not because we lose our licence to practice but because our jobs either disappear, or our reputations are damaged enough to mean our market value has crashed.” (Aly 2016)

There is no peak body or over-arching organisation in Australia to help the diverse group of emergency managers identify standards of performance, and to lobby decision makers on their behalf (unlike for other professions such as doctors, lawyers, engineers, accountants).

Of equal concern, there is no definitive register or list of roles or positions of Australian emergency managers. We have no data or statistics to give us an insight into who they are, and to help us to prepare them for their roles.

In this Background section, I have endeavoured to place in context the concept of who are emergency managers, why they exist, and how their environment requires some changes to the way in which they do their business. In the next, I attempt to address the challenges that this presents them.

1.2 Problem Statement

Natural disasters are occurring more frequently, and are bigger than ever before (Leaning & Guha-Sapir 2013). This trend is occurring in Australia (the 2009 Black Saturday fires, the 2010-11 Victorian and Queensland floods and cyclones) and internationally (Hurricane Katrina in 2005, the Bangladesh floods of 2016, Christchurch New Zealand’s earthquake in 2011 and the Philippines Typhoon Hayan in 2013). The consequences for communities affected by these events are becoming greater. These new impacts require a reconsideration of the traditional approaches to preparing for, responding to and recovering from them. Further, various Inquiries, Royal Commissions and Evaluations have universally
opined that the ways in which these events have been managed have been flawed in various ways, and measures must be introduced to change that. In his seminal report *Review of the 2010–11 Flood Warnings & Response* Neil Comrie stated that:

“The Victorian Flood Review has concluded that there are significant shortcomings in Victoria’s emergency management arrangements” (Victorian Government 2011).

The UN’s Office for the Coordination of Humanitarian Affairs (UNOCHA), the World Health Organization (WHO), its regional Pan American Health Organization (PAHO), and the Inter-Agency Standing Committee’s (IASC) Global Health Cluster after the Haiti earthquake in 2010 demanded that actions be taken for better “coordination, accountability, transparency, stringent oversight and control, and professionalism” during and after every major crisis (PAHO 2010). While these comments refer to the international humanitarian sector, they could well have been equally applied to the emergency management sector in Australia, given that such shortcomings have been identified in various forums over recent years regarding Australian efforts.

In Victoria, the recent report by the Victorian Auditor General’s Office *Managing Emergency Services Volunteers* (Victorian Auditor-General’s Report 2014) found that there are issues with both the Country Fire Authority’s (CFA) and State Emergency Service’s (SES) workforce planning. CFA does not know how many volunteers it needs and SES does not accurately know how many it has. Further, the report found that both agencies’ procedures for analysing their volunteers’ skills and qualifications are flawed.

The changes confronting emergency managers cannot be addressed until we have some understanding of who they are – what are their skills, qualifications, experience and backgrounds. There needs to be some understanding within their ranks and outside of whether or not they are capable of providing a professional service. In order to address any shortcomings in these areas, they need an overarching professional body to steer their endeavours. As yet, no data exists to define who they are, whether or not EM is a profession, whether or not emergency managers are ready to be seen as professionals, or what type of body might be required to help the necessary transition.

**1.3 Purpose of the Study**

Finding out who are Australia’s emergency managers will enable policy makers to identify and provide them with the appropriate tools and knowledge as an effective means of ensuring that they are able to provide maximum assistance to our communities in building their disaster resilience. Identifying what aspects of professional associations will be helpful for emergency managers will provide some insight into the ‘how’ of implementing and applying the tools and knowledge. The next section attempts to refine how that problem might be resolved.

**1.4 Initial Research Question**

My initial research question was:

“In what ways do the profile, background, experience and qualifications of Australia’s emergency managers constitute a discrete emergency management profession?”
This informed how I approached my literature review.

1.5 Significance of This Study

This section asks why this issue is important.

In Australia, the responsibility to plan for, mitigate, respond to and recover from disasters lies with emergency managers. Good intentions and well-meaning amateurs, in the absence of professional preparation, training and coordination will not meet the requirement (Cranmer & Biddinger 2014). Emergency managers need to seek and receive the best possible professional support in carrying out those tasks. If they do, then Australia’s communities will be made safer and will suffer significantly reduced consequences of the disasters that will inevitably befall them.

Of equal concern, no peak body or over-arching organisation exists in Australia to help this diverse group identify standards of performance, and to lobby decision makers on their behalf (unlike for other professions such as doctors, lawyers, engineers, accountants).

Providing a professional response to Australian communities suffering the consequences of disasters amounts to an absolute imperative. Ultimately, people will die if we don’t get it right.

This is a unique study in the Australian emergency management setting. It constitutes an initial step towards understanding the Australian emergency management sector.

This study will help identify what emergency managers need to provide a professional service and will attempt to identify what form that professionalisation might take.

1.6 Structure of the Thesis

After this Introduction at Chapter 1, Chapter 2 describes my Literature Review. Chapter 3 outlines my Research Method, while Chapter 4 sets out the Results of the research. Chapter 5 provides a Discussion of the results and Chapter 6 provides a Conclusion to the thesis.
CHAPTER 2: LITERATURE REVIEW

“EM, because it works across other professional disciplines, is a ‘networked’ profession. This is an important distinction that reflects the fact that EM draws together the ‘whole’ from a distributed population”.

Anonymous survey respondent No. 110

In this Chapter, I describe what the literature shows about emergency managers and what work has already been done to define an appropriate professional context for them.

2.1 Literature Review Questions

I undertook an initial convenience literature review to establish the scope and context of my topic. I then began my preliminary literature review by searching Google Scholar using the key words emergency manager and professional. This review, together with my own reading of the literature over many years led me to the recognition that there are relatively few sources in the grey literature and even fewer peer-reviewed sources specifically related to my topic. I attempted to answer the following questions with my literature review:

- What has been done in my field of research? What principles of selection am I going to use?
- How do the various studies relate to each other? What precise contribution do they make to the field? What are their limitations?
- How am I going to order my discussion? Chronological, thematic, conceptual, methodological, or a combination? What section headings will I use?
- How does my own experience/research fit into what has already been done (Monash University 2007)?

I formulated a search strategy similar to that adopted by Erin Smith in her seminal review of disaster specific literature (Smith et al. 2009).

2.2 Search Strategy

I identified Key Words from my own knowledge and experience in the area. I also sourced them from the few articles that I knew of that related to the topic. They were:

- EMERGENCY (Synonyms: disaster; crisis; catastrophe)
- EMERGENCY MANAGEMENT (Synonym: disaster management)
- EMERGENCY MANAGER (synonym: disaster manager)
- PROFESSION (Synonyms: professional; professionalisation)
- PROFESSIONAL ASSOCIATION (Synonym: professional body)

2.2.1 Peer-Reviewed Literature

I accessed MEDLINE, OVID, SCOPUS. I used ENDNOTE as my search and bibliographic tool. I followed the advice of Erin Smith (Smith et al. 2009) who suggested that, while a broad range of multi-disciplinary journals publish peer-reviewed, event-
specific publications, the majority of peer-reviewed, event-specific literature is indexed in MEDLINE.

2.2.2 Grey Literature

I accessed Google Scholar and Web of Science. In assessing the relevance of these papers and others I viewed, I was guided by the principles espoused by Trisha Greenhalgh in her paper in the British Medical Journal - *How to read a paper: getting your bearings (deciding what the paper is about)* (Greenhalgh 1997).

2.2.3 Hand-search of Relevant Journals

See Attachment 2 for a list of relevant Journals.

2.2.4 Secondary Search

From bibliographies of relevant articles.

2.2.5 Inclusion Criteria

English language; Western countries; Australian; and time frame 1990-2017.

2.3 Results of Literature Review

This section outlines what were the outputs of my Literature Review.

**Ovid Medline (incorporating Pubmed)**

“emergency manage*” AND profession* - 1745 articles. Refined to 22 after viewing titles and abstracts.

“disaster manage*” AND profession* - 530 articles. Refined to 9 after viewing titles and abstracts.

**Scopus**

“disaster manage*” AND profession* - 176 articles. Refined to 11 after viewing titles and abstracts.

**Google Scholar**

“emergency manage*” AND profession* – 566. Refined to 6 after viewing titles and abstracts.

“disaster* manage*” AND profession* - 69. Refined to 5 after viewing titles and abstracts.

**Web of Science**

“emergency” AND manage* AND professional – 1,577 articles. Refined to 11 after viewing titles and abstracts.

“emergency manage*” AND professional* - 188. Refined to 8 after viewing titles and abstracts.

“disaster manage*” AND professional* - 83. Refined to 2 after viewing titles and abstracts.

**Hand searches**


I adopted the PRISMA approach to reporting on my findings (PRISMA 2017):

- Records identified through data-base searching: 4,950,
- Full-text articles assessed for eligibility: 74, and
- Studies included in qualitative synthesis: 74.

I was left with a total of 74 articles which satisfied my criteria all of which I read and analysed to draw out relevant information for my study.

My search confirmed the findings by Erin Smith (Smith et al 2009) that there is limited peer-reviewed literature in the field, that the grey literature is of variable relevance and quality, and that the literature is dissipated across a vast number of journals and publications. She found that, following 25 individual disasters or overwhelming crises, a total of 2,098 peer-reviewed, event-specific publications were published in 789 journals. My search found a similar fragmentation.

In Smith’s study, when a comprehensive search for one event was undertaken, 75% of all peer reviewed articles for that event were indexed in MEDLINE (Smith et al. 2009). This reflects a preponderance of health topics in the disaster literature. The ‘emergency management’ literature is eclectic and overlaps (and is overwhelmed by) ‘emergency medicine’ and ‘emergency departments’. Similarly, ‘professional’ literature incorporates a large number of ‘health professional’ references.

The grey literature searches and the references identified from bibliographies of other articles were complex and produced a number of more recent articles. Nevertheless, the rigour, evidence and credibility of some of them leaves something to be desired and it is difficult to identify them from among the plethora of relevant journals and sources.

Overall, the search results show that:

- There is little research into what are the characteristics of Australian (or, in fact, other nationalities’) emergency managers.
- Most of the relevant literature is from USA.
- Studies in this area are complicated by the complexity and inaccuracy of language in this field, by the absence of clear definitions, and by the breadth of sectors which play a part in emergency management.
- Further research could explore why a preponderance of health-related research and writings appear in the emergency management field.

Having accessed the relevant literature, the following section brings together the key themes that help identify who are emergency managers and how they might fit into an emergency management profession or professional body.

2.4 Findings from the Literature Review

“The effects of disasters are not self-evident. The disaster literature yields little consensus on the definition of the basic concept of disaster or any of its derivatives. As a consequence, the whole disaster area is plagued by a variety of concepts and
definitions about which there is little agreement and no consensus” (Quarantelli 1985)².

Any study of emergency management and of those who practice it is beset by the issue outlined by Quarantelli. His point is just as valid today as it was thirty years ago. The sector is still bedevilled by the lack of consistency about the terminology and language used to describe it. Mayner & Arbon (2015) highlighted this problem by conducting a survey of 110 glossaries containing definitions of disaster terminology. They found 128 definitions for ‘disaster’. They reinforced the point that standardisation of definitions is required to provide a consistent framework to report events, to collect data, to plan and to build a foundation for further research, policy and practice.

My literature review enabled me to get a better understanding of the context of my research and to correlate it with my personal experience. An important part of the literature included a review of the definitions of the various terms in common use in the sector. In particular, I attempted to pinpoint key definitions of: What is an Emergency? Is it the same as a Disaster? What is Emergency Management? Who are Emergency Managers? What is a Profession? Emergency Management as a Profession; What is a Professional Body? What are Professional Standards?

2.4.1 Emergency

There are many definitions of what constitutes an emergency. This section highlights those which best define the specific properties of an emergency for the sector.

The United Nations defines an emergency in very general terms:

“A sudden and usually unforeseen event that calls for immediate measures to minimize its adverse consequences” (ReliefWeb 2008).

Emergency Management Australia (EMA) provides several definitions, including:

“Any event which arises internally or from external sources which may adversely affect the safety of persons in a building or the community in general and requires immediate response by the occupants” (Australian Government 1998).

Jones (2000) is at pains to place emergencies at the ‘lighter’ end of a hierarchy which some suggest goes: Event-Emergency-Disaster-Crisis-Catastrophe:

“An emergency is an event that threatens people, property, business continuity, or the community and may develop into a disaster or critical incident.”

Drabek (2004) incorporates the all-important role of communities:

“An emergency is an unexpected event which places life and/or property in danger and requires an immediate response through the use of routine

² Although this work of Enrico Quarantelli’s was well outside my inclusion criteria, he is such a doyen of the EM research world and his work is so often quoted by most EM researchers, it still rings true to today’s environment and has certainly guided my thinking in this arena.
community resources and procedures. Examples would be a multi-automobile wreck, especially involving injury or death, and a fire caused by lightning strike which spreads to other buildings. Emergencies can be handled with local resources”.

Incorporating both concepts:

“An emergency is an unexpected occurrence or sudden situation that requires immediate action…It may involve communities (as a disaster does) or individuals (which a disaster does not) …” (Porfiriev 1995).

Highlighting the two concepts most satisfactorily defines in my mind what constitutes an emergency.

This definition leads into what is sometimes seen as a synonym for emergencies: Disasters.

2.4.2 Disaster

What defines a disaster? Loss of life? Destruction of property? Destruction of infrastructure? Is it just a matter of scale? What level of personal or community disruption identifies an event as a disaster? There are many definitions. “A condition or situation (with or without casualties) for which the available resources are inadequate” (Koenig 2013) seems to be a little simplistic.

An overly prescriptive, yet ironically limited definition from EMA:

“A disaster is a serious disruption to a community or region caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multi-agency and community response. Such serious disruption can be caused by any one, or a combination, of the following natural hazards: bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike; or tornado” (Australian Government 1998).

Because it brings into play the concepts of hazard and vulnerability, this definition provides a useful context:

“Disasters occur at the interface of vulnerable people and hazardous environments” (Bolin & Stanford 1998).

Similarly:

“A disaster generally results from the interaction, in time and space, between the physical exposure to a hazardous process and a vulnerable human population” (Smith 1996).

Perhaps this goes closest to providing a broader insight:

“A disaster is a non-routine event that exceeds the capacity of the affected area to respond to it in such a way as to save lives; to preserve property; and to
maintain the social, ecological, economic, and political stability of the affected region” (Pearce 2000).

The concept of ‘exceeding the capacity of the affected area’ is underlined by the World Health Organisation:

“A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources” (WHO 2008).

The UNISDR defines a disaster as:

A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts. The effect of the disaster can be immediate and localized, but is often widespread and could last for a long period of time. The effect may test or exceed the capacity of a community or society to cope using its own resources, and therefore may require assistance from external sources, which could include neighbouring jurisdictions, or those at the national or international levels. (United Nations International Strategy for Disaster Reduction 2017).

Although wordy, this last definition of Disasters most clearly identifies the breadth of the framework in which emergency managers must work if they are to deliver a professional service. Its value also lies in the fact that UNISDR definitions are seen as the internationally accepted ‘gold standard’.

2.4.3 Emergency Management

In order to protect communities from the worst consequences of emergencies and disasters, governments have long ago established organisations to attempt to manage these events. Yet the delineation of ‘Emergency Management’ (EM) as a discrete and separate field of endeavour is a relatively recent phenomenon compared with other professions (medicine, the law, engineering) (Marshall 1987).

EM is defined in the Emergency Management Australia Glossary of Terms as:

“A range of measures to manage risk to communities and the environment” (Australian Government 1998).

There are many more definitions of EM. (Wilson and Oyola-Yemaiel 2001) cite (Hoetmer 1991)’s early definition of emergency management as the:

“. . . discipline and profession of applying science, technology, planning, and management to deal with extreme events that can injure or kill large numbers of people, do extensive damage to property, and disrupt community life” - notable in that it explicitly indicates that EM is a profession – as early as 1991!
Marshall (1987) first expressed the important concept that emergency management is a quite different, separate career from emergency response, a theme to be considered later. Nevertheless, a clear understanding and agreement on what constitutes the core competencies, certifications and career trajectories of those who practice EM still eludes us (McCreight 2009).

Further perspectives are offered. Emergency management is:

“An ongoing process to prevent, mitigate, prepare for, respond to, and recover from an incident that threatens life, property, operations, or the environment.” (NFPA 2007).

This approach reveals consistency with the ‘Prevention, Preparedness, Response, Recovery’ disaster framework espoused in the Australian Government’s National Strategy for Disaster Resilience (Australian Government 2011). In Waugh’s definition, the important concept of risk is introduced:

“In simplest terms, emergency management is the management of risk so that societies can live with environmental and technical hazards and deal with the disasters that they cause” (Waugh 2000).

More simplistically:

“Emergency management refers to the expert systems that manage people and resources to deal with disasters” (Rubin 2000).

My preferred definition of emergency management comes from the United Nations which provides one of the most comprehensive definitions. EM is:

“the organization and management of resources and responsibilities for dealing with all aspects of emergencies, particularly preparedness, response and rehabilitation. Emergency management involves plans, structures and arrangements established to engage the normal endeavours of government, voluntary and private agencies in a comprehensive and coordinated way to respond to the whole spectrum of emergency needs. This is also known as disaster management” (UNISDR 2004).

So who has responsibility to address these concepts?

2.4.4 Emergency Managers

“Emergency managers are professionals who practice the discipline of emergency management by applying science, technology, planning and management techniques to coordinate the activities of a wide array of agencies and organizations dedicated to preventing and responding to extreme events that threaten, disrupt, or destroy lives or property” (Drabek 2004).

This definition clearly identifies emergency managers as professionals. On the other hand, the US Department of Homeland Security makes an important distinction between emergency managers and responders – a theme to which my study refers briefly:
“Responders and emergency managers are both doers and planners, which is to say that to lead response and recovery efforts effectively, they must also prepare effectively (i.e., plan, organize, equip, train, exercise, and continuously evaluate actual performance)” (DHS 2008).

Most recently, the USA Federal Emergency Management Agency (FEMA) refers to the:

“Emergency Management Community: The broad community of practice involved in emergency management. This community includes, but is not limited to the following: traditional state, local, federal, and tribal emergency managers; those in public security, public health, and public safety agencies; first responders; public works; business partners; non-governmental organizations (NGOs); federal agencies with equities in emergency management; and academicians who have studied or published on the topic of emergency management” (FEMA 2012).

Nowadays, there is a recognition that emergency managers are not solely members of emergency services. Emergency managers are not first responders (McEntire 2015). Many are also environment workers, social workers, health workers.

There is some precedent for studies of who are emergency managers. Most previous studies are from North America and the UK. The most comprehensive I have found discusses a benchmark study of emergency managers in Canada (Bird 2013). In it, base-line data was collected from 415 Canadian emergency managers to define their qualifications, skills, experience and other demographic data. It is a comprehensive, well-structured piece of research, providing useful insights into the makeup of emergency managers. This research has significantly helped me to formulate my approach to my research. I have found no other similar studies. In the humanitarian sector, ELRHA conducted a global survey exploring the state of professional development in the international humanitarian sector and questioned a total of 938 participants through an online survey in English, French and Spanish (ELRHA 2012b). Its focus was on the barriers and solutions to access by humanitarian workers to professional training.

The Australasian Fire and Emergency Services Agencies Council (AFAC) conducted an internal survey in 2012 of the employees of its member agencies (including some demographic questions) primarily to ascertain the level of interest in professionalisation. It found that the level of interest was high but the AFAC Board decided that the issue was not a high priority. I understand that that situation has changed recently (See para 2.4.6 below).

Thus the vexed question of who are emergency managers, as highlighted by the varied insights presented here, has prompted me to pursue my research to attempt to resolve the issue.
2.4.5 Profession

There are many definitions of what constitutes a profession. Heather Freegard proposes that nearly every group of people who share a common occupation applies the word ‘profession’ or ‘professional’ to themselves or their occupation (Freegard 2012). Fortunately, the concept of professionalism has advanced past the perspective of Sir William Osler’s view:

“Medicine is the only world-wide profession, following everywhere the same methods, actuated by the same ambitions, and pursuing the same ends. The homogeneity, its most characteristic feature, is not shared by the law, and not by the Church, certainly not in the same degree.” (Osler 1906 cited in Burkle 2014).

Burkle goes on to identify that

“the study of disaster/crisis science differs from other disciplines in that, uniquely, it is at once both multi- and trans-disciplinary.” (Burkle 2014).

Gustafson (1982) defines several properties of a profession:

- an extensive body of technical knowledge and concepts or theories;
- a way of thinking, reasoning and applying judgment to specific courses of action;
- generally institutionalized;
- adopt social and legal controls such as degrees, certifications, licensing, codes of conduct and liabilities; and
- are generally service-oriented and exist to meet the needs of individuals and communities

Other definitions suggest that a profession requires theoretical knowledge, skill, and judgment that others may not possess or cannot easily comprehend (Sylves 2008). Further, a need exists to recognise that professionalism also implies experience – often gathered early in a career through some form of apprenticeship or internship (Burkle & Walker 2013).

The Australian Government Professional Standards Council (AGPSC) believes that, traditionally, the path to professional status has been grounded in the quarantining of expertise by a specific community, which:

- Defined how aspiring professionals gained recognised knowledge and qualifications;
- Controlled entry to employment; and
- Developed standards for practice in that expertise.

Professional knowledge was generated exclusively in the academic environment of universities, and led to those who received this training having an expert monopoly. The ultimate goal was to have this expertise recognised by the community, and often formally by the state (Australian Government 2014a). Nevertheless, the AGPSC
believes that given today’s fast-changing environment of knowledge and expertise, it is now generally understood that simply deriving an income from a particular task might make you an ‘expert’ or ‘good at your job’ – but if you’re a ‘professional’, this has a broader meaning.

Having read literally scores of definitions of profession across a comprehensive range of EM and other literature, I was still unable to find one which encapsulated all of the aspects of professionalism mentioned here. While I found this surprising, I can only observe that different authors and researchers, in considering the topic through their own specific lens, vocation or point of view were driven to emphasise those aspects which were triggered by their particular context, placing less emphasis on the broader, more all-encompassing picture.

Ultimately, perhaps not surprisingly, I found the term most succinctly yet comprehensively defined in the Oxford Dictionary as:

"An occupation whose core element is work, based on the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning, or the practice of an art founded on it, is used in the service of others. Its members profess a commitment to competence, integrity, morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society" (Oxford English Dictionary 2007).

I have highlighted those terms which I believe are essential elements of the definition of profession. No other definition in the literature brings them all together. I sought an eclectic, cross-disciplinary definition and was unable to find one in the learned literature. I have adopted this as my preferred definition, in combination with the four criteria for a profession defined by James (2016), (viz. Specialisation of Knowledge, Establishment as a Livelihood, Organisation and Institutionalisation, and Legitimacy and Authority) as the basis for my study of Australian emergency managers.

While this definition leads to a recognition that professionals are accountable to those served and to society, Cruess, Johnston & Cruess (2004) address this issue, identifying a social contract between a profession and society. This concept is reflected more and more in recent times by the changes in the way in which governments are adopting accreditation processes for ‘professions’. The Australian Health Ministers’ Advisory Council (2011) is adopting this perspective in its approach to regulating health practitioners.

More recently, an increasing prevalence exists of professions identifying their ‘charter’ with their ‘clients’ or recipients of their services. Thus, rather than professionals being identified by a ‘closed shop’ perspective, as ‘keepers of the
specialist knowledge’, they are more frequently being seen (and assessed) by the effectiveness of their service to the community, by the accord between provider and recipient. This movement is an outcome of the national competition policy discussed and contextualised in the *Review of the Demand Driven Funding System* (Kemp & Norton 2014). It is most recently manifested in the new draft Paramedics Registration Bill under consideration in Victoria in 2014. It placed the emphasis of the paramedics’ professional services on their community service and on protection of the public, rather than their organisational values or key specialist knowledge and skills (Victorian Government 2014). It is worth noting that the progression of their cause will see the adoption across the nation and New Zealand of agreed professional standards for paramedics in September 2018 (Keast, K 2017).

2.4.6 Emergency Management as a Profession

What, then, are the ramifications for emergency management? Barnes, Bergin & Nichola (2014) propose that:

“In Australia, there is an inaccurate perception that emergency management is more an occupation than a profession. This is based on a historical perception that emergency management personnel merely respond to emergencies, rather than performing their many roles in planning, reducing consequences and engaging in community recovery. While the responder role is well recognised, the preventive role and its complexity have grown quickly in all jurisdictions. We need to invest in the next generation of emergency management leaders”.

The paper by James (2016) was particularly helpful in clarifying how consideration of emergency management as a profession might be achieved. Although he specifically addresses emergency managers in the international humanitarian context, his observations translate very closely to Australia’s emergency managers. He helps us understand the particular professional considerations of the sector by suggesting a number of elements that set a profession apart from other domains. In many cases, professions have evolved to mean a class of livelihoods that have status, privileges and responsibilities distinct from occupations. He defines four key criteria to identify a profession:

- **Establishment of the profession as a livelihood.** Long periods of education and training, acceptance into the field, progression from worker to manager then into retirement has been one of the hallmarks of professions.
- **Organisation and institutionalisation.** A number of attributes within a profession ensure a collective function between members of the profession. They include autonomy and self-regulation, knowledge sharing and development and mutual support. This organisation and the institutionalisation that binds professionals together gives them the ability to act independently and, at times, influence public policy.
• **Specialisation of Knowledge.** This manifests itself through a complex body of knowledge and experience gained through thorough training for those entering the field and ongoing training for those who stay in the field. Qualifications are awarded through a recognised process and documented with a certification, diploma or degree. This knowledge is manifested through the emergence of a range of specialised journals and publications.

• **Legitimacy and Authority.** Professionals gain legitimacy and authority from two sources: common perception and authoritative recognition. The first cultivates an image that separates its members from others. It manifests itself through visible symbols (uniforms, status symbols, logos, specialist equipment). The second comes from the establishment of norms, codes and standards.

Just as emergency managers in other countries are seen as being part of a developing or evolving profession, there is evidence in the literature that some aspects of the practice of EM in Australia reflect at least some of the characteristics of a profession. Choi (2008) and McEntire, Fuller, Johnstone & Webber (2002) identify how emergency managers address the ‘service-oriented’ criteria of a profession, while specialisation and mastery of technical knowledge and concepts or theories are reflected by an extensive growth of the academic discipline and technical training within the field (Alexander 2003, and Phillips 2005) at least in the US, if not so much reflected in the Australian context.

Some work has already gone into the identification and refinement of the knowledge, attributes, core competencies, skills, experience, qualifications and certifications required of emergency management professionals and some initial steps have been taken towards institutionalization of those requirements. Authors (and practitioners) such as Alexander (2003), Blanchard (2005), Marks (2005), Spiewak (2005) and Stuart-Black, Coles & Norman (2005) have contributed to such efforts. *The Public Safety Training Packages* created by Government Skills Australia go some way towards identifying these competencies in an Australian context (Government Skills Australia 2014).

In more recent times, AFAC has launched an Emergency Management Professionalisation Scheme (EMPS) (Australasian Fire and Emergency Services Authorities Council 2016). The Scheme:

“... provides a mechanism for AFAC to: lead on developing EM practice and practitioners; establish the standards that define emergency management roles and the quality of services provided; and assure the community, government and industry colleagues that practitioners are certified to undertake their duties”.

The EMPS is essentially a certification program for incident controllers as opposed to a full-blown professionalisation approach. It brings with it the limited access by the broader EM community reflected in many AFAC products. Nevertheless, by incorporating a set of Professional Standards, a Code of Ethics and a listing of Standards of Professional Conduct the EMPS does represent an initial, positive step
towards the recognition and implementation of many of the characteristics of a profession for Australian emergency managers.

It has to be said in recent times more of the professionalisation effort has been directed towards, and emerged from, the international humanitarian sector which may well support the ongoing evolution, maturation and professionalisation of the field in Australia.

On a broader scale, within the international humanitarian context there is recognition of the need to adopt a more holistic approach to disaster and emergency management going beyond just planning, processes and programs, but giving attention to the development of practitioners (Stuart-Black, Coles & Norman, 2005). This realisation is reflected even in Australian State-level emergency management policies and strategies (Government of Victoria 2014).

One major consideration to prompt advances towards professionalisation is reflected in the following:

“There would be considerable benefit in developing a national curriculum and establishing a national dialogue aimed at professionalising emergency management. In this way, our governments and communities could have some assurance the required investment in the next generation of emergency management leaders is being made” (Barnes, Bergin & Nichola, 2014).

To this end, useful research was done by Heather Crawley of the TAFE NSW Riverina Institute (Crawley 2016) outlining and evaluating the current state of affairs regarding VET and tertiary training and education for Australia’s EMs, studying the prevalence, or otherwise, of standardised programs and competencies across the sector. She goes on to propose some effective solutions to the gaps she identified.

Carol Cwiak offers a further consideration:

“If the field is to stabilize and professionalize, it must help inform change under the framework it knows to be effective, as opposed to continually adjusting to new frameworks that have been created without the considered input of the emergency management community” (Cwiak 2009).

In order to monitor the growth and development of EM as a profession, demographic data from practitioners collected and monitored over time would establish its foundation. Little evidence exists of accretion of this data in Australia or overseas. Comparison of this data against benchmark profiles and further profiling would contribute to the creation of a discrete EM profession and towards the future development of professionalisation of the sector. This study aims to help create that base-line data for Australian emergency managers.

By providing leadership and not just technical expertise, emergency managers would be:

“…viewed not as technocrats but as program managers with the responsibility for crafting strategies for community resilience” (Choi 2008).
Choi goes further and says that a paradigm shift is required in how the concept of emergency management and the role of the practitioner are viewed within society. There is significant recognition in the literature that this shift must occur (Choi (2008), Oyola-Yemaiel & Wilson (2005) & Stuart-Black, Coles & Norman (2005). Just as academics are sometimes seen as sitting in ‘ivory towers’, not understanding ‘the real world’, so emergency management policy makers frequently do not understand the complex realities ‘on the fire-ground’. Similarly, it is often difficult for front-line workers to operationalise policies, particularly if they lack an understanding of the broader concepts and principles informing those policies (Koenig 2013). Only a comprehensive professional development program can address these shortcomings across the spectrum of those involved in emergency management. Such a program could be overseen by an appropriate professional body.

2.4.7 Professional Body

Professional associations are organisations formed by members to represent the needs and interests of the profession. These associations ensure the standards of training and service provided by practitioners and coordinate activities on behalf of the wider profession to maintain high standards of practice. They make representations to governments and other organisations on behalf of their members, they provide professional development activities and they advance research related to professional practice and activities to define and support standards of practice (Russell 2012). Burkle and Walker (2013) suggest that only by establishing some form of professional association can true professionals deliver on all of the professional outcomes identified. There is general agreement that all professional bodies or organisations share common functions. They generally seek to champion the values of the profession, improve standards, support practitioners and advance knowledge through scholarship and research.

It is essential to establish why such an organisation exists. As previously discussed, contemporary thinking is directed around contributing to greater community good rather than merely for the interests of the members. In practice, tensions can arise between a commitment to the overall purpose of community service and the needs of a ‘membership organisation’, which can foster a club mentality. The former must always prevail and the value base that underpins it must be clearly defined. Further tensions are created in attempting to correlate the regulation function with the members’ services function.

A limited number of EM professional bodies have been established – many in the USA, a handful in Australia. In the Australian context, none has captured anything more than a relative handful of members. Internationally, the one with the largest following is the International Association of Emergency Managers. While it is essentially an American-centric body, an Oceania Chapter was created in 2007 with fewer than 100 members (Pearce 2007). While the Australian Institute of Emergency Services (AIES 2017) purports to “provide a professional body for the study of the roles and functions of Emergency Services and Emergency Management
Organisations throughout Australia”, it limits its professional scope to “the progression and recognition of the Emergency Service role in the community”.

2.4.8 Professional Standards

As a step towards establishing agreed standards, competencies and certification tools, one of the services a professional association provides, several initiatives have been established overseas. Based in the UK, the international network Enhancing Learning and Research in Humanitarian Assistance (ELHRA) is defining common competencies reflecting best practice in humanitarian health EM which are being translated into professional training and certification tools (ELRHA 2012a). In 2011 a number of North American universities offering programs in humanitarian health formed the Professional Association of Academic Training Centres in Humanitarian Health (PAATCHH). This group furthers the professionalisation of the humanitarian health work force through the promotion of evidence-based best practices, the development and testing of innovative interventions and research, and the creation of new linkages between academic centres and humanitarian workers (Burkle and Walker 2013). No similar body exists in Australia, although, de facto, the Tertiary Education Quality and Standards Agency (Australian Government 2014b) acts as gatekeeper for all tertiary education standards. For the first time, a proposed set of standards for higher education providers teaching EM in Australia has been recently published (Fitzgerald G., Rego J., Ingham V. et al, 2017). It has yet to be universally adopted, but it gives some hope for future education programs.

One example of maintenance of professional standards is that of the national registration scheme for health practitioners, the National Registration and Accreditation Scheme (Australian Government 2014c) which commenced operation on 1 July 2010. Practitioners from fourteen health professions are now registered nationally with the Scheme and may practise in any State or Territory. Each profession has a National Board which regulates the profession, registers practitioners and develops standards, codes and guidelines for the profession with extensive powers to protect the public.

The establishment in Australia of a body similar to ELRHA or PAATCHH, servicing the EM community, would go a long way towards addressing the need for accountability, transparency, oversight, coordination and quality performance standards required of an emergency management profession in this country.

In fact the Australian EM community would do well to emulate the humanitarian sector in general, and the health practitioners in particular, who have made great progress in establishing professional standards and competencies as described by a number of authors (Walker, Hein, Russ, Bertleff & Casperz 2010), (Kene, Pack, Greenough & Burkle 2009), (Daily, Padjen & Burnbaum 2010) and (Burkle, Walls, Heck, Sorensen, Cranmer, Johnson, Levine, Kayden, Cahill & Van Rooyen 2013).
2.5 Revised Research Question

The literature review expanded my perceptions and understanding of the issues involved in my research question. At the same time, it helped define the specificity of the questions I needed to answer to address the issue. Informed by the results of my literature review, I amended my initial research question by adding secondary questions as follows:

Primary Question:
“In what ways do the profile, background, experience and qualifications of Australia’s emergency managers constitute a discrete emergency management profession?”

Secondary Questions:

- “Who are the emergency managers in Australia?”
- “What are their backgrounds, experience and qualifications and skills?”
- “Do Australian emergency managers think they constitute a profession?”
- “Is there a case for a Professional Association for Australian emergency managers?”

2.6 Summary

In this section, by conducting a comprehensive literature review I was able to identify those aspects of my research question which informed the direction of my research. I needed to identify who ARE the Australian emergency managers, what are their skills, knowledge, qualifications, experience and background. I needed to identify whether the conditions exist within the sector to create a professional association in the context of how the literature defines one. The findings of this literature review enabled me to clarify the issues presented in identifying how and in what form an Australian emergency management profession might be viewed. They also led me to define what would be the most appropriate research methods to adopt. The following Section outlines those methods.
CHAPTER 3: RESEARCH METHOD

“It is essential that EM in Australia continues to have a solid basis with experience and understanding on which education and knowledge builds to develop well-rounded and well-grounded professional emergency managers.”

Anonymous survey respondent No. 346

Having defined the topic and context of my research and having applied the findings of relevant literature in the field, this Chapter addresses the framework in which I undertook the research, the methodology I used, how I gathered data and the governance of my research methods.

3.1 Conceptual Framework

The framework/lens by which I approached my thesis is that of Professionalism. As an outcome of the analysis undertaken in my literature review, as argued at paragraph 2.4.5 above, my preferred definition of a profession is:

"An occupation whose core element is work, based on the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning, or the practice of an art founded on it, is used in the service of others. Its members profess a commitment to competence, integrity, morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society” (Oxford English Dictionary 2007).

My literature review also explored contemporary models of professionalism eg. health, engineering, law, in the Australian context.

Having used my literature review to establish my definitions of EM, of the workforce which I studied i.e. emergency managers, and of what constitutes professionalism, I then addressed my research question.

This is not a theoretical project. It is an applied process exploring professionalism in Australian emergency management, in an attempt to understand what it might mean in our context. It is expected that this project will generate hypotheses for future research.

3.2 Methodology

I followed the research framework outlined in the Monash University Guide to Good Research Practice (Monash University 2012). I modelled my proposal on the guidelines as presented by Ryan, Coughlan & Cronin (2007) (with some amendments) as follows:

- I adopted a mixed-methods methodology, in itself a separate methodological orientation – defined by Tashakori and Creswell (2012) as “research in which the investigator collects and analyses data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or a
program of inquiry”. Such an approach was essential to combine a mix of qualitative and quantitative methods. I wanted to use different measures of the concepts which I was researching in order to provide a more robust overall measure. While adopting quantitative measures can provide much ‘factual’ information about my topic, only by adopting complementary qualitative measures can I ‘put flesh on’ those facts; only through these measures can I explore the ‘human factor’ nuances that raw numbers cannot explain. Following up quantitative data with additional qualitative processes enabled me to dig deeper, particularly into some of the more complex issues in this area of study.

- In order to minimise the risk of biases in my data, I adopted a triangulated methodology. I used three different data-gathering techniques:
  - My review of current, relevant writings in the peer-reviewed and grey literature as outlined earlier;
  - An online survey; and
  - Structured interviews.

The online survey and structured interviews enabled me to take advantage of the respective qualities of the qualitative and quantitative methods.

- The aim was to enable the findings from my sample(s), as far as possible, to be generalisable across the emergency management sector.

3.3 Survey

The online survey was a quantitative study employing a cross-sectional approach, focussing initially on capturing demographic data. It was designed to capture a benchmark profile of the sector. I consulted the limited number of similar international surveys (Grist 2007, Cwiak, Kline & Kaarlgaard 2004, Cwiak 2008 & Bird 2013). They provided primary references for the design of the survey, albeit requiring amendments geared for an Australian rather than a North-American context. The survey was also informed by my literature review.

The survey was pilot-tested by a small group of representative emergency managers. The survey was conducted during the two-week period 26 April-9 May 2016. It consisted of 41 questions and took approximately 20 minutes to complete. The survey tool is at Attachment 3. The questions asked about the demographics (gender, place of work, age, salary etc.), background, experience, qualifications and skills of emergency managers. They also sought participants’ opinions on basic matters pertaining to the professionalisation of emergency management such as how their various skills and qualifications compare to their ideas about professions.

3.3.1 Target Population

The challenge in targeting and engaging people who were the prospective participants for this study was not an easy one. Because there is as yet no such thing as an emergency management profession although there is some opinion that it does constitute a nascent one, I had no access to a clear existing profile of who is an Australian emergency manager.
I wanted to reach out to as wide an audience as possible, including the broadest possible cross-section of emergency managers. In my own mind, to be as inclusive as possible for the purposes of this research, I defined them as anyone involved in helping to prepare for, prevent, respond to or recover from emergencies, in any capacity - part-time, full time, volunteer, senior, junior, responder, recovery manager, planner, public servant, health worker, community worker. My best approach was to identify some organisations in which emergency managers worked, ask for the ‘imprimatur’ of their ‘chiefs’ and request their cooperation in making the online survey available to their staff. This enabled those who self-identified as emergency managers to self-select and helped avoid potential opting-out by relevant people through some false misperception of their eligibility or inclusion.

My sampling methodology is described in the following paragraphs.

3.3.2 Sampling Procedure

I was very conscious of the challenges in identifying a sampling process that would enable me to make generalisations across the sector. Dill, McNeil, & Monsere (2016) have clearly outlined the pitfalls in relying on probabilistic, non-probabilistic and convenience sampling in surveys. My method, of necessity, combined non-probabilistic and convenience sampling. It was non-probabilistic in that it is not known how representative the sample is of the broader EM sector. It was a convenience sample in that I attempted to engage ‘lists’ of practitioners through their parent bodies but not, it must be admitted, through ALL such bodies. The challenge was that it was difficult to gather the opinions of ALL emergency managers. The response rate could not be easily or meaningfully calculated since the distribution is unknown.

3.3.3 Survey Sample

Because no data base of emergency managers exists in Australia, I could not distribute my survey directly.

I have an extensive network of friends, colleagues and acquaintances in the sector not only to participate, but to provide access to their extended networks to maximize participation. I was relatively confident of accessing a good population in Victoria. I was less sanguine about my ‘reach’ in other jurisdictions. Nevertheless, I was confident, through my own dealings with emergency managers across the nation, that opinions and information provided by Victorians could be legitimately extrapolated across Australia. I expected to be able to use some of my senior colleagues to disseminate within their organisations my request for participants.

The very broad inclusion criterion was that participants were Australian and that they believed that they were employed in emergency management activities. This implied that most, if not all, would be self-selected.

In practical terms, I never believed that I would achieve blanket coverage of all members of all emergency management/emergency service agencies. In some way,
that was probably a blessing, given that the combined staff numbers of the Victorian Country Fire Authority (CFA) and the Metropolitan Fire Board (MFB) in 2016 was 65,676 (Victorian Government 2016) – let alone adding all those in the State Emergency Service (SES) and other government and private sector, NGO, and NFP emergency managers!

Eventually, the ‘first-tier’ of participants, in passing the online survey link to others, caused a snowball sampling. While this was a positive outcome, in that it ‘swept up’ many more participants, it meant that in spreading far and wide, the original inclusion criterion was degraded. As will be seen in the analysis section, a number of non-Australian emergency managers responded. These numbers were relatively small, but although they added different perspectives which bear further research, they slightly degraded the relevance of the findings in addressing my issue. Nevertheless, I retained their data because my international experience tells me that there is much that is universally common among emergency managers no matter where they work.

I anticipated having up to 500 people receive the survey. I expected a relatively high participation rate – some 400. While I understand that this was a high expectation, it was not unrealistic because of the high interest that I knew existed in the sector for the topic and because of my comprehensive network of emergency managers who I anticipated would wish to participate.

3.3.4 Survey Instrumentation

*Survey Monkey* (Survey Monkey 2016) was chosen as the survey tool, for its ubiquity, its inbuilt analysis capabilities, its familiarity to many people and the fact that it provided a secure online capability and preserved the anonymity of participants. The *Survey Monkey* privacy policy is at [https://www.surveymonkey.net/mp/policy/security/](https://www.surveymonkey.net/mp/policy/security/).

3.3.5 Survey Analysis

The survey used a descriptive analysis, summarising the data, to construct a mental picture of the data and the people they relate to. The data was analysed primarily through the descriptive statistical capacity of the Survey Monkey tool and through methodical summarising and batching of responses through a focussed manual bracketing of responses in the interviews.

3.4 Interviews

In this section I outline how data was collected through the interviews.

Each interviewee was invited to participate through an email addressed to their supervisor’s official email address. Each was provided with an Explanatory Statement describing my research, how the interview would be carried out and the process for ensuring confidentiality. Each signed a Consent Form.
The semi-structured interviews were each conducted at pre-arranged mutually convenient times. Each lasted an hour and followed a theme list as initial scripted questions (Attachment 4) with some follow-up questions. They were recorded. The researcher later created summaries of the recordings and they were immediately wiped.

All Interview documentation is at Attachment 4.

3.4.1 Interviews Sample

I wanted to interview participants who could provide some insight into the anomalies which I detected from analysis of my survey, to confirm trends from the survey and to expand on the results obtained in the survey. It was important, also, to seek as broad a range of perspectives as possible. I consulted with my supervisors and defined a stratification of participant characteristics then chose participants who I knew could offer different insights through lenses of gender, experience, age and seniority. They were:

- 3 x male senior executives from three different agencies (including 1 interstate);
- 1 x female EM consultant;
- 1 x female recovery manager;
- 1 x female local government EM manager;
- 1 x male EM manager; and
- 1 x female EM Headquarters manager.

Total interviewees: 8.

3.4.2 Conduct of Interviews

I conducted the interviews face-to-face with the participants, using an electronic device to record each conversation, and I later transcribed the key elements of each interview.

3.4.3 Interview Analysis

I was very conscious of the need to ensure the trustworthiness of the analysis process, so I strictly applied the criteria as outlined in the following section.

There have been many critics, particularly in the scientific and engineering fields, of the trustworthiness of qualitative data (Rolfe 2006). Nevertheless, several models have been offered which show how these concerns can be minimised. Shenton (2004) suggests that if data from qualitative research can be shown to be credible, transferable, dependable and confirmable, findings based on such research can be just as trustworthy as those based on quantitative research. Because I was committed to including both qualitative and quantitative data in this research, I took appropriate measures to reinforce the trustworthiness of the qualitative evidence.

Credibility. In choosing the interviewees:
“multiple voices, exhibiting characteristics of similarity, dissimilarity, redundancy, and variety [were] sought in order to gain greater knowledge of the wider group” (Shenton 2004).

Individual viewpoints and experiences were verified against others and a rich picture of the attitudes, opinions and behaviours of those interviewed could be drawn based on the contributions of a range of people. Further, adopting a triangulation approach reinforces the credibility of the data (Brewer J & Hunter, A 1989). This adoption of different methods in concert compensates for their individual limitations and exploits their respective strengths.

Transferability. Reflecting the approach by Shenton (2004), by providing comprehensive detail of the context in which the research was carried out, I have enabled readers to compare the outcomes in this report with those that they have observed in their own environment and experience. In order for an assessment of the extent to which these findings may be true of people in other settings, similar, further research employing the same methods could be conducted in different environments.

Dependability. Lincoln & Guba (1985) highlight the overlap between dependability and credibility demanding that if the research is repeated, in the same context, with the same methods and the same participants, similar results would be obtained. The adoption of scripted semi-structured interviews goes some way to ensuring such an outcome. Documentation of the research design and implementation and detailed description of the operational detail of the gathering of data in this report strengthen the dependability of the research.

Confirmability. Patton (1990) stresses that the confirmability or objectivity of research hinges significantly on ensuring that as far as possible, the work’s findings are the result of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher. To that end, I have laid out a clear ‘audit trail’ allowing an observer to trace the course of the research step-by-step by following the decisions made and the procedures described.

3.5 Participants

Eventually, 859 People contributed to this research, 851 through responding to the on-line survey and 8 through structured interviews. (Some of the interviewees also completed the on-line survey.)

3.6 Governance

The following section outlines the governance processes undertaken as an essential element of the research.

3.6.1 Ethics Approval

Ethics approval was sought from the Monash University Human Research Ethics Committee (MUHREC 2014) in two stages. The Committee was satisfied that the
first proposal for the low-risk research represented by the survey met the requirements of the *National Statement on Ethical Conduct in Human Research* (Australian Government 2015) and granted approval on 30 March 2016 (CF16/910 - 2016000474). The second low-risk application was submitted in respect of the conduct of the interviews. Approval was granted on 7 February 2017 (2017-7965-8134).

No personally identifiable information was collected or presented. The survey was designed to be completed only once by each individual. The *Survey Monkey* platform used computer cookies and user identifiers in order to verify that each survey response was from a unique user. None of that technical information was collected or retained and at no time was it available to the researcher or Monash University.

The information gathered through the survey is summarised in the body of this report in totally de-identified form in which no individual can be identified. At no time could any specific response or comment be attributed to an individual. All data has been kept strictly confidential and handled by and available to only the researchers. Although Monash University is supervising this project, at no time will Monash University have access to the raw data. The data collected through the *Survey Monkey* platform is hosted in Australia and therefore subject to Australian laws and jurisdiction; the survey responses are not processed or stored elsewhere. The data is stored electronically and password protected. It is only accessible to the researchers. It will be retained electronically for a period of five years following submission of this final report.

No responders were compelled to participate in this project. Those who did participate were free to withdraw at any time before submitting their responses without prejudice. Nobody did. Choosing to continue with the survey signified that participants had read and understood the survey description and consent statement, constituting informed consent (Attachment 3).

### 3.6.2 Organisational Governance

For access to the online survey participants, I wrote to the organisational contacts at Table 1 below seeking their help to circulate the survey invitation within their organisational units. The invitation included the web link for the survey.

Further, the Monash University Disaster Resilience Initiative (MUDRI 2017) maintains an email list of contacts within the emergency management sector who are interested in emergency management. Participants were contacted via email under the auspices of MUDRI to invite them to participate.
### Table 1 – Organisational Contacts for Survey Distribution

Participants were encouraged to forward the survey to others they may know who were emergency managers. These additional participants were encouraged to forward the survey invitation to other potential participants. This snowballing effect significantly broadened the reach of the survey. One of the problems that this presented was that the exact number of eligible participants is not known, nor is the number of eligible participants who actually received the invitation to complete the survey. As a result, a response rate could not be calculated for the survey.

For access to the potential interview participants I emailed a representative sample of selected Emergency Managers seeking their cooperation. I chose participants to ensure a range of gender, seniority, experience and expertise. See 3.4.1 above.
3.6.3 Risk Assessment and Management

I undertook a detailed risk assessment process to ensure there was no risk to participants and that they would undergo no discomfort by participating in the research. I implemented the following risk treatments:

- Use of standardised survey question sets;
- No vulnerable population participants;
- Free and implied consent obtained from all participants;
- Raw data disassociated, no identifiable personal information; and
- Data is not of a contentious or volatile nature.

Similarly, the risk to compromise of the confidentiality of the data gathered was minimised by the implementation of the following:

- Only the members of the research team will have access to the original data.
- Data will be kept on Monash computers and the personal computer of Investigator 4.
- Data will be retained in MUARC for at least 5 years.
- MUARC will take reasonable steps to destroy or permanently de-identify personal information if it is no longer needed for any purpose.
- All data will be stored for 5 years without any identifying information. Electronic data will then be erased and hard-copy data will be shredded and disposed of.

I conducted a general risk assessment by undertaking a study of the consequences of risks to the success of the project, including an insufficient number of survey respondents, inability to access appropriate interviewees, incapacity of supervisors, changes to my own personal situation.

3.7 Summary

This Chapter began with a description of the conceptual framework on which my research was based. It has outlined the methodology adopted for this research – the ‘mechanics’ if you will. It has described why it was essential to adopt a mixed-methods methodology, and to triangulate my research by undertaking a comprehensive literature review, conducting an online survey of 851 emergency managers, followed by semi-structured interviews with a further eight representative emergency managers. The Chapter has outlined details of how the online survey and the interviews were designed and implemented. Selection and sampling processes for participants were described and criteria and standards for the qualitative process were defined. Finally, the governance measures put in place were defined.

The following Chapter presents the results of the gathering of data.
CHAPTER 4: RESULTS

“EM is not a profession in that EM professionals are not running independent practices and are not members of a profession where it is the profession that can ‘strike them off’ the relevant register. The iconic professions are medicine and law (not to mention the 14 health professions registered under AHPRA). Being an EM manager is not in the same category. EM professionals are ‘professional’ in that they have a commitment to competence and the public good, but it is not a ‘profession’ in the way those other professions are.”

Anonymous survey respondent No. 282

4.1 Results

Eight hundred and fifty-one emergency management practitioners responded to the online survey. None were eliminated. They were asked forty-one questions (see Attachment 3). The data collected from the survey and the interviews is reported in this section.

4.2 Survey Results

The findings from each survey question are outlined in the following paragraphs. Each question is reported in the following format:

- Title/subject,
- Finding, and
- Comment.

All results are reported using the Survey Monkey format. Unfortunately, this has resulted in some unavoidable inconsistencies in formatting.

The data collected provides an indication of a small section of the sector. It must be viewed in light of the limitations of this online survey. This was not a comprehensive sample and many of the ‘rank and file’, in particular ‘responders’ and volunteers, are not necessarily represented. Nevertheless, it does indicate the pressing need for more definitive research to be undertaken.
4.2.1 Gender. Participants were asked to identify their gender.

Q.: Are you ...?

![Gender distribution graph](image)

**Comment:** At Figure 1, 33% of participants were female, 67% were male.

For a number of subsequent questions I have conducted a comparative analysis of responses across the survey by gender which showed little significant variation by gender for most overall responses.

4.2.2 Age Participants were asked to define their age.

Q.: What is your age?

![Age distribution graph](image)

**Figure 1: Gender**

**Figure 2: Age**
**Comment:** Responses showed a skew towards the older end of the scale. More than 70% of participants are aged more than 40. There is little variance by gender, with 64% of females aged more than 40.

**4.2.3 Place of Work** Participants were asked to identify their (broad) geographical place of work.

Q.: Where is your place of work?

![Place of Work Diagram]

**Figure 3: Place of Work**

**Comment:** Because of the ‘snowball effect’ of the distribution of the survey, emergency managers from a wide range of places participated (Figure 3). Participants came from as far afield as Texas USA, the United Kingdom, Italy, Israel, and Norway. They constitute only 4% of participants and their responses are not statistically significant. Nevertheless, because of the more focussed original distribution of the survey, 96% are from Australia, 56% are from Victoria.
4.2.4 Area of EM Employment  Participants were asked in what area of emergency management work they were employed.

Q.: Which of the following best describes the area of Emergency Management work you are MOST involved in (please select only one)?

<table>
<thead>
<tr>
<th>Area of EM Employment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Management (Senior management)</td>
<td>21.09%</td>
</tr>
<tr>
<td>Emergency Management (Middle management/Supervisor)</td>
<td>34.12%</td>
</tr>
<tr>
<td>Technical specialist</td>
<td>5.83%</td>
</tr>
<tr>
<td>Firefighter/Emergency Service worker</td>
<td>16.63%</td>
</tr>
<tr>
<td>Community service</td>
<td>3.60%</td>
</tr>
<tr>
<td>Support staff (e.g. comms, admin, etc.)</td>
<td>3.85%</td>
</tr>
<tr>
<td>Policy/research</td>
<td>5.58%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>9.31%</td>
</tr>
</tbody>
</table>

Table 2: Area of EM Employment

Comment: The first two responses reflect the fact that more than half the participants were in middle and senior level management positions. This means that a preponderance of the data gathered is seen through a ‘senior/middle management’ lens.
4.2.5 Type of Organisation Participants were asked what type of organisation they worked for.

Q.: What type of organisation do you work for? (please select only one).

Figure 4: Type of Organisation

Comment: At Figure 4, the broad range of organisations where emergency managers work is dramatically illustrated. They are employed in land management agencies, in NGOs, in the private sector, in academia, as well as in the traditional emergency services. Interestingly, the single most common sector for this cohort of emergency managers is Health Services. I believe this reflects a factor of the distribution of the survey, rather than an indication that a preponderance of emergency managers work in the health services.
4.2.6 Education Qualifications  Participants were asked to describe the highest level of general education qualification they had achieved.

Q.: What is the highest level general education qualification you have been awarded?

Comment: More than 48% of survey participants have attained Bachelor or Postgraduate degrees (Figure 5). This represents a higher percentage than I expected. Further research could discover what discipline those degrees represent.
4.2.7 Highest Level of EM Qualification  Participants were asked what was their highest level of EM-related qualification.

Q.: What is the highest level of Emergency Management/Public Safety-related qualification you have achieved?

Comment: More than one third (34.57%) of participants have no emergency management qualification other than an in-house, non-award qualification. It is worthy of note that just over 10% have VET level qualifications.
4.2.8 How Important Is a More Advanced EM Qualification  Participants were asked to identify the importance to them of gaining a higher level of EM qualification.

Q.: How important is it to you to attain a more advanced level qualification in Emergency Management/Public Safety?

Figure 7: Importance of a higher level of EM qualification.

Comment: Reinforcing the message at Figure 6 where a very small percentage of participants showed tertiary EM qualifications, Figure 7 shows there is an appetite for a program which would make such studies accessible and available. 67% of participants stated that they thought it was quite important (or greater) to gain a higher level of EM qualifications.

4.2.9 Official Title  This question asked: “What do you DO?” How is your position described?

Q.: What is your official title?  (Please respond in the generic sense of your emergency management job title; This question is not asking you to disclose your actual jurisdiction or organisation - rather, it asks 'What do you do?')

<table>
<thead>
<tr>
<th>Position</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Manager</td>
<td>16%</td>
</tr>
<tr>
<td>Coordinator</td>
<td>11%</td>
</tr>
<tr>
<td>Senior Officer</td>
<td>8%</td>
</tr>
<tr>
<td>Operations Officer</td>
<td>7%</td>
</tr>
<tr>
<td>Director</td>
<td>5%</td>
</tr>
<tr>
<td>Team Manager</td>
<td>4%</td>
</tr>
<tr>
<td>Community Work</td>
<td>3%</td>
</tr>
</tbody>
</table>
Health Commander 3%
Firefighter 3%
Deputy 2%
Other Miscellaneous 38%

Table 3: Official Title

Comment: There was a wide range of seemingly random titles for the emergency managers who responded (Table 3). Their titles implied that some were in ‘operational’ roles, some in ‘emergency management’ roles, some in roles that worked with communities in one form or another. Other ‘singular’ miscellaneous titles included communications officers, duty supervisors, policy officers and ‘technical experts’. This goes to the heart of the difficulty identified earlier that exists in defining who are emergency managers, and even what is emergency management?

4.2.10 Type of Employment Participants were asked to define their type of employment.

Q.: Type of primary emergency management employment/commitment:

![Figure 8: Type of Employment]

Comment: Nearly 70% of participants are full-time emergency managers (Figure 8). There appears to be no gender bias in this area, with 69% of females employed full-time. Only 18% of participants are part-time/temporary, as are a fair number of the 5% listed as ‘other’. The survey also ‘missed’ the large number of volunteers who
make up the emergency management workforce in Australia, particularly in the emergency services.

4.2.11 Type of Jurisdiction: Participants were asked to define the type of jurisdiction in which they were employed.

Q.: Type of Jurisdiction?

**Comment:** Although a sound cross-section of different sectors which engage in emergency management are represented among survey participants, by far the preponderance (some 68%) lie within State/Territory government departments or agencies.

![Figure 9: Type of Jurisdiction](image-url)
4.2.12 Salary  Participants were asked to state their salary.

Q.: What is your approximate gross salary?

![Salary Distribution](image)

**Figure 10: Salary**

**Comment:** Almost 80% of participants reported their salaries as being in the ‘senior’ ($75,000+) brackets (Figure 10). A gender-based review shows that only 66% of females are in this bracket. This figure also confirms the preponderance of middle/senior managers amongst the participants.

4.2.13 Number of Years in Emergency Management  Participants were asked how many years they had worked in emergency management.

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1</td>
<td>1%</td>
</tr>
<tr>
<td>1-5</td>
<td>16%</td>
</tr>
<tr>
<td>6-10</td>
<td>22%</td>
</tr>
<tr>
<td>11-15</td>
<td>15%</td>
</tr>
<tr>
<td>16-20</td>
<td>14%</td>
</tr>
<tr>
<td>More than 20</td>
<td>32%</td>
</tr>
</tbody>
</table>

**Table 4: Number of Years in Emergency Management**
**Comment:** Reporting on the number of years in which emergency managers have served, participants reinforced that the sector comprises older, longer-serving members, with few ‘newbies’ joining.

**4.2.14 Years in Current Position** Participants were asked how many years they had held their current (primary) position in emergency management?

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 year</td>
<td>5%</td>
</tr>
<tr>
<td>1-5 years</td>
<td>53%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>24%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>9%</td>
</tr>
<tr>
<td>16-20 years</td>
<td>5%</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Table 5: Number of Years in Current Position**

**Comment:** In spite of the ‘older’ workforce identified in the previous table, analysis of the length of time in which participants have been in their current position indicates that it seems to be a very internally-mobile body, changing positions relatively frequently, with 53% being in their current position for only 1-5 years. Table 4 shows that the mobility is generally not into or away from emergency management employment.

**4.2.15 Shared Responsibility** Participants were asked to ascertain whether they worked full time in emergency management duties, or whether they did EM work as a ‘secondary duty’. Those who identified that they had ‘shared responsibilities’ were asked to identify what percentage of time was spent on non-EM tasks and to broadly identify what those tasks were.

**Q.:** Is your current position dedicated only to emergency management or is it a shared responsibility with another function?

![Figure 11: Shared Responsibility](image)
Comment: Approximately half of Australia’s emergency managers are only ‘part-timers’ in EM and have other responsibilities outside their EM roles.

Those who identified that they had other duties were invited to estimate what percentage of their time was spent doing other, non-EM duties.

<table>
<thead>
<tr>
<th>% of time spent in non-EM roles</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25%</td>
<td>15.6%</td>
</tr>
<tr>
<td>26-50%</td>
<td>25.1%</td>
</tr>
<tr>
<td>51-75%</td>
<td>18.9%</td>
</tr>
<tr>
<td>76-99%</td>
<td>40.2%</td>
</tr>
</tbody>
</table>

Table 6: Percentage of time spent in non-EM roles

Comment: Although not all provided that information, Table 6 outlines their responses.

The most common ‘other’ functions within those roles were described variously as below:

- Management: 33%
- Operations: 5%
- Service: 5%
- Training: 5%
- Community: 5%
- Other: 45%

Table 7: Other Responsibilities

Comment: In addition to the responsibilities outlined at Table 7, a broad range of other duties was identified – ‘Intelligence threat assessments’, ‘Fuel hazard management’, ‘Arranging contracts’, ‘Health research’, ‘Finance’, etc.
4.2.16 EM as First Field of Work

Participants were asked about their pathway into an EM career.

Q.: Was emergency Management your first field of work?

Figure 12: EM as First Field of Work

Comment: This shows that there is not a robust direct-entry process for emergency managers.

4.2.17 First field of work

Participants were asked what was their first field of work if EM was not their first career.

Q.: If emergency management was not your first field of work, please specify your first field of work.

<table>
<thead>
<tr>
<th>Field</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>8%</td>
</tr>
<tr>
<td>Nursing</td>
<td>6%</td>
</tr>
<tr>
<td>Health Worker</td>
<td>5%</td>
</tr>
<tr>
<td>Military</td>
<td>5%</td>
</tr>
<tr>
<td>Service Industry</td>
<td>4%</td>
</tr>
<tr>
<td>Paramedic</td>
<td>3%</td>
</tr>
<tr>
<td>Police</td>
<td>3%</td>
</tr>
<tr>
<td>Education</td>
<td>3%</td>
</tr>
<tr>
<td>Engineering</td>
<td>3%</td>
</tr>
<tr>
<td>Public Service</td>
<td>2%</td>
</tr>
<tr>
<td>Administration</td>
<td>2%</td>
</tr>
</tbody>
</table>

Table 8: Pre-EM Careers

4.2.18 Other EM Activities  Participants were asked what other EM activities they were involved with beyond their primary task.

Q.: Aside from your primary employment in emergency management, are you engaged in emergency management through any of the following? (This is intended to reflect participation that is not required by or directly related to your primary emergency management employment.) Please tick all that apply:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Member of a professional association</td>
<td>20.48%</td>
</tr>
<tr>
<td>Member of a technical committee and/or working group</td>
<td>10.71%</td>
</tr>
<tr>
<td>Member of a policy committee and/or working group</td>
<td>13.92%</td>
</tr>
<tr>
<td>Professional writing/editing (professional or technical newsletters, standards, SOPs or trade journals)</td>
<td>2.68%</td>
</tr>
<tr>
<td>Peer-reviewed writing/editing (published article or books)</td>
<td>1.34%</td>
</tr>
<tr>
<td>Member of a conference board or conference organising committee</td>
<td>2.41%</td>
</tr>
<tr>
<td>Research</td>
<td>4.55%</td>
</tr>
<tr>
<td>None of the above</td>
<td>43.91%</td>
</tr>
</tbody>
</table>

Table 9: Other EM activities

Comment: Disappointingly, this was a technically flawed question. The researcher failed to allow participants to select more than one of the options. A significant number pointed this out in the block asking them to specify the ‘others’. Interpretation of this data is difficult.
4.2.19 Emergency Management Certifications  Participants were asked if they had emergency management certification.

Q.: Do you hold any specific emergency management certifications (i.e. accreditations by an EM organisation such as IAEM, AFAC)? Please check all that apply:

Figure 13: EM Certifications

Comment: Very few emergency managers have availed themselves of the opportunity to obtain any form of certification.

4.2.20 EM Training  Participants were asked what EM training they had completed.

Q.: What emergency management training have you completed? (This question is general in nature since it is readily acknowledged that the options, titles, levels and sources of emergency management training available are diverse and immense, and that level of detail is beyond the scope of this survey.) Please select all training areas that apply. (This is training that you have completed.)

Table 10 lists the top 5 training programs accessed by the participants:

<table>
<thead>
<tr>
<th>Training Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Emergency Management</td>
<td>77.9%</td>
</tr>
<tr>
<td>Basic Emergency Management</td>
<td>69.9%</td>
</tr>
<tr>
<td>Incident Control System</td>
<td>65%</td>
</tr>
<tr>
<td>Emergency Operations/Control Centre</td>
<td>56%</td>
</tr>
<tr>
<td>Risk Management</td>
<td>48%</td>
</tr>
</tbody>
</table>

Table 10: Emergency Management Training
Comment: The interest in this Table lies not in the amount of training that has been received, but rather in the number of emergency managers who have NOT received training in some very basic EM skills and concepts. More than half have received no training in Risk Management; nearly a quarter have not been trained in the introductory principles of EM and nearly a third have not been exposed to the Basic Emergency Management concepts.

This echoes from a different angle the findings at Figure 6: Highest Level of EM Qualification - the absence of a universal, structured learning and training program for emergency managers.

4.2.21 General Level of Formal Education Participants were asked to assess their level of formal general education.

Q.: How would you rate your level of formal general education (eg. diploma, degree)?

Comment: It is difficult to reconcile this result with that at Figure 5: General Level of Education. If 43% of participants reported that they had Bachelor/Masters/Doctorate qualifications, it seems an anomaly that 82% of participants at Figure 14 believe that they are highly or moderately educated. While there may be an element of inaccuracy in interpretation of the terms ‘highly’ and ‘moderately’, an observer might be forgiven for concluding that it smacks of an element of smugness, or self-satisfaction by a number of participants at ‘where they are’!
4.2.22 Level of Emergency Management Education  Participants were asked to assess their level of EM education.

Q.: How would you rate your level of formal education (eg. diploma, degree) specific to emergency management/public safety?

Comment: Participants were generally less satisfied with their EM education levels, compared with their general education levels. Only 51% thought they were highly/moderately educated. It is reasonable to assume they are desirous of more EM and public safety education programs. It reflects the level of discontent shown at Figure 7: Importance of a Higher Level of EM Qualification.
4.2.23 Level of Emergency Management Training (e.g. In-House) Participants were asked to assess their level of Emergency Management in-house training.

Q.: How would you rate your level of emergency management training (eg In-house training)?

![Bar chart showing the level of emergency management training: Highly trained, Moderately trained, Average, Limited training, No training.]

**Figure 16: Level of Emergency Management Training**

**Comment:** Participants were generally more satisfied with the level of in-house EM training they have received. 67% thought they were highly/moderately trained.
4.2.24 Level of EM Experience  Participants were asked to assess their level of emergency management experience.

Q.: How would you rate your level of emergency management experience?

![Figure 17: Level of EM Experience](image)

Comment: Participants reported a high level of experience. 76% believed they possessed a high or a moderate level of experience. This would be expected in what has been identified as an ‘ageing’ workforce. There is an observable reduction in the general level of experience among females. 59 % report that they are quite or very experienced.

4.2.25 Role of Formal General Education  Participants were asked to identify the role played by their formal general education.

Q.: With respect to my current position, my formal general education (eg. diploma, degree):

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has played no role</td>
<td>4.99%</td>
</tr>
<tr>
<td>Has very little significance</td>
<td>10.84%</td>
</tr>
<tr>
<td>Might be considered an asset</td>
<td>26.11%</td>
</tr>
<tr>
<td>Is an important asset</td>
<td>47.65%</td>
</tr>
<tr>
<td>Is my most important asset</td>
<td>8.56%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>1.85%</td>
</tr>
</tbody>
</table>

Table 11: Importance of Formal General Education.

Comment: More than half of participants (56%) said that their formal education was an important or the most important asset in their current role. Interestingly, by
definition, a large number, only slightly less than half, believe formal education does not play a significant role.

“Experience is important but we’ve got something so very wrong at the moment when the last thing people look at on my CV is my education.”

Anonymous survey respondent No. 307

4.2.26 Role of Formal EM Education

Participants were asked to identify the role played by their formal EM education.

Q.: With respect to my current position, my level of formal education (degree, diploma) specific to emergency management/public safety:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has played no role</td>
<td>4.71%</td>
</tr>
<tr>
<td>Has very little significance</td>
<td>12.41%</td>
</tr>
<tr>
<td>Might be considered an asset</td>
<td>24.25%</td>
</tr>
<tr>
<td>Is an important asset</td>
<td>40.37%</td>
</tr>
<tr>
<td>Is my most important asset</td>
<td>6.70%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>11.55%</td>
</tr>
</tbody>
</table>

Table 12: Importance of Formal EM Education

Comment: Participants have placed less importance in their current position on their EM education than on their Formal General education (only 47% reported that it is an important or the most important asset. Compare with Table 9). Perhaps this adds weight to the contention that the ‘external’ skills brought to EM by non-traditional emergency managers are highly valued and applied.

4.2.27 Role of EM Training (In-House, Non-Award Qualification)

Participants were asked to identify the role played by their in-house EM training.

Q.: With respect to my current position, my emergency management training (e.g. in-house, non-award qualification):

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has played no role</td>
<td>1.85%</td>
</tr>
<tr>
<td>Has very little significance</td>
<td>5.28%</td>
</tr>
<tr>
<td>Might be considered an asset</td>
<td>20.40%</td>
</tr>
<tr>
<td>Is an important asset</td>
<td>58.92%</td>
</tr>
<tr>
<td>Is my most important asset</td>
<td>11.70%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>1.85%</td>
</tr>
</tbody>
</table>

Table 13: Importance of EM Training (e.g. in-house, non-award qualification)

Comment: Of the three influences considered at Tables 11, 12, 13 participants have reported that EM training (in-house, etc.) has a significantly higher importance to
them in their current position. 70% reported that it is an important or the most important asset. That begs the question of whether it really does play a more important role, or is the response a reflection that more people have received in-house, non-award EM training than general education as identified earlier? Further research needs to be done to resolve this issue. Graduates of a sample of relevant training courses could be surveyed to identify whether or not that was the case. It also reinforces the proposal that more attention must be paid to identifying and implementing a rigorous, accessible, comprehensive learning and training program.

4.2.28 Importance of Practical EM Experience. Participants were asked to describe the importance of their practical EM experience in their current roles.

Q.: With respect to my current position, my practical experience:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has played no role</td>
<td>0.71%</td>
</tr>
<tr>
<td>Has very little significance</td>
<td>2.28%</td>
</tr>
<tr>
<td>Might be considered an asset</td>
<td>9.84%</td>
</tr>
<tr>
<td>Is an important asset</td>
<td>39.23%</td>
</tr>
<tr>
<td>Is my most important asset</td>
<td>47.22%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>0.71%</td>
</tr>
</tbody>
</table>

Table 14: Importance of EM Experience

Comment: A significantly greater number of participants (86%) believe that their practical experience is an important or their most important asset than any of their formal education or training. The generalisation to be made from this in the context of the three previous Tables is that participants believe that experience is more important than education or training.

4.2.29 Role of Formal General Education in Promotion/Recruitment  Participants were asked what role their formal general education would play in their promotion/recruitment.

Q.: If I were seeking a promotion or a new job in emergency management, I think my formal general education:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would play no role in the selection process</td>
<td>5.71%</td>
</tr>
<tr>
<td>Might hinder my chances in the selection process</td>
<td>4.85%</td>
</tr>
<tr>
<td>Would neither hinder nor help my chances in the selection process</td>
<td>25.39%</td>
</tr>
<tr>
<td>Might help my chances in the selection process</td>
<td>47.93%</td>
</tr>
<tr>
<td>Would significantly help me in the selection process</td>
<td>16.12%</td>
</tr>
</tbody>
</table>

Table 15. Relevance of Formal General Education
Comment: This table reflects a certain ambivalence by participants about the impact of their formal general education on their recruitment or promotion prospects. Nearly half think it ‘might’ help, with only 16% thinking it would play a ‘significant’ role.

4.2.30 Role of Formal EM Education in Promotion/Recruitment Participants were asked what role their formal EM education would play in their promotion/recruitment.

Q.: If I were seeking a promotion or a new job in emergency management, I think my formal emergency management education:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would play no role in the selection process</td>
<td>5.56%</td>
</tr>
<tr>
<td>Might hinder my chances in the selection process</td>
<td>9.27%</td>
</tr>
<tr>
<td>Would neither hinder nor help my chances in the selection process</td>
<td>19.26%</td>
</tr>
<tr>
<td>Might help my chances in the selection process</td>
<td>42.65%</td>
</tr>
<tr>
<td>Would significantly help me in the selection process</td>
<td>23.25%</td>
</tr>
</tbody>
</table>

Table 16: Relevance of Formal EM Education

Comment: 65% of participants thought that their EM education ‘might’ or ‘would’ help their promotion/recruitment chances.

4.2.31 Role of EM Training (In-House, Non-Award Qualification) in Promotion/Recruitment Participants were asked what role their in-house EM training would play in their promotion/recruitment.

Q.: If I were seeking a promotion or a new job in emergency management, I think my emergency management training (e.g. In-house, non-award qualification):

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would play no role in the selection process</td>
<td>3.57%</td>
</tr>
<tr>
<td>Might hinder my chances in the selection process</td>
<td>2.28%</td>
</tr>
<tr>
<td>Would neither hinder nor help my chances in the selection process</td>
<td>20.54%</td>
</tr>
<tr>
<td>Might help my chances in the selection process</td>
<td>54.78%</td>
</tr>
<tr>
<td>Would significantly help me in the selection process</td>
<td>18.83%</td>
</tr>
</tbody>
</table>

Table 17: Relevance of in-house, non-award qualification EM Training

Comment: 72% of participants thought that their (in-house, non-award qualification) EM training ‘might’ or ‘would’ help their promotion/recruitment chances. Further research asking the relevant questions would be useful to understand why the remainder (approx. one third) did not.
4.2.32 Role of Practical Experience in Promotion/Recruitment  Participants were asked what role their practical experience would play in their promotion/recruitment.

Q.: If I were seeking a promotion or a new job in emergency management, I think my practical experience:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would play no role in the selection process</td>
<td>0.57%</td>
</tr>
<tr>
<td>Might hinder my chances in the selection process</td>
<td>2.85%</td>
</tr>
<tr>
<td>Would neither hinder nor help my chances in the selection process</td>
<td>6.99%</td>
</tr>
<tr>
<td>Might help my chances in the selection process</td>
<td>40.37%</td>
</tr>
<tr>
<td>Would significantly help me in the selection process</td>
<td>49.22%</td>
</tr>
</tbody>
</table>

Table 18. Relevance of EM Experience

Comment: Consideration of Tables 15-18 reinforces the belief among responders that EM experience outweighs qualifications in recruitment/promotion considerations ... and this from predominantly senior emergency managers who would play a significant role in promotion/recruitment decisions.

4.2.33 Most Important EM Training  Participants were asked to identify the five most important areas of EM training.

Q.: Regarding emergency management training, I would recommend that an individual seeking employment in emergency management should focus on the following five areas: (Please select the five areas of emergency management training that you deem most important or valuable to working within the field. Note: there is no ranking within your five selections; for the purposes of this question, each of your five selections carries equal weight)

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Emergency Management</td>
<td>30.39%</td>
</tr>
<tr>
<td>Introduction to Emergency Management</td>
<td>52.64%</td>
</tr>
<tr>
<td>Incident Command/Control System</td>
<td>55.21%</td>
</tr>
<tr>
<td>Emergency Site Management</td>
<td>12.84%</td>
</tr>
<tr>
<td>Emergency Operations/Coordination Centre</td>
<td>39.80%</td>
</tr>
<tr>
<td>Incident Controller</td>
<td>19.54%</td>
</tr>
<tr>
<td>Hazardous Materials/Chemical, Biological, Radiological, Nuclear and Explosives</td>
<td>6.28%</td>
</tr>
<tr>
<td>Psychosocial First Aid/Critical Incident Stress Management</td>
<td>16.98%</td>
</tr>
<tr>
<td>Public Information/Crisis Communications</td>
<td>26.39%</td>
</tr>
<tr>
<td>Community Engagement/Communication</td>
<td>35.81%</td>
</tr>
<tr>
<td>Exercise Programming/Design</td>
<td>14.98%</td>
</tr>
<tr>
<td>Search and Rescue</td>
<td>3.85%</td>
</tr>
<tr>
<td>Business Continuity Management</td>
<td>15.26%</td>
</tr>
</tbody>
</table>
Emergency Community/Social Services 4.71%
Disaster Health Management 8.70%
Hazard, Risk, Vulnerability Analysis 25.53%
Disaster Recovery 29.24%
Emergency Consequence Management 21.97%
Resilience 22.68%
Australian/New Zealand Standards Association Training 2.14%
Australian/New Zealand Armed Forces Training 1.00%
Red Cross Training Courses 1.57%
United Nations Training Courses 0.57%
International Humanitarian Training 0.57%
Volunteer Management 11.70%
Ethics Training Courses 3.57%
Risk Management 36.09%

<table>
<thead>
<tr>
<th><strong>Table 19: Recommended EM Training</strong></th>
</tr>
</thead>
</table>

**Comment:** The top five training courses recommended by participants were:

- Incident Command/Control Systems (55.2%),
- Introduction to Emergency Management (52.6%),
- Emergency Operations/Coordination Centres (39.8%),
- Risk Management (36.1%), and
- Community Engagement/Communication (35.8%)

Comparing this with the training identified at **Table 10. Emergency Management Training**, there is a slight anomaly between what training has actually been done by participants and what they would recommend. The difference could be dismissed as nominal only.

“As a newcomer to EM I found those already working in the area very welcoming, professional and eager to support their colleagues. I was surprised that I was not required to have a formal qualification or training to start making decisions in emergency situations. There is an emphasis on having strong principles focussed on the community and an understanding of the frameworks that apply. You don’t necessarily need a lot of training, but I think it would help and it would be better if we all did. I think it is important to allow specific EM expertise to develop (through formal education) for those who wish to dedicate the time to study.”

Anonymous survey respondent No. 253
4.2.34 Relevance of Certification. Participants were asked whether prospective emergency managers should hold/seek some form of accreditation. They were asked to indicate whether such an applicant should/should not concern themselves with certification, should have at least one relevant certification or several, or whether they should at least be working towards certification.

Q.: Regarding certification (i.e. accreditations by an EM organisation such as IAEM, AFAC), I would recommend that an individual seeking employment in emergency management:

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should not concern themselves with it</td>
<td>21.97%</td>
</tr>
<tr>
<td>Should have at least one related certification</td>
<td>42.23%</td>
</tr>
<tr>
<td>Should have multiple related certifications</td>
<td>12.27%</td>
</tr>
<tr>
<td>Should be working towards certification</td>
<td>23.54%</td>
</tr>
</tbody>
</table>

Figure 20: Relevance of EM Certification

Comment: A perceived desire exists for some form of certification with 78% of participants expressing some support for one form or another of certification by EM recruits. The challenge is to define and implement appropriate, universally accepted certification standards and processes. None of the existing schemes seems to enjoy favour at this time (See Table14. Importance of EM Experience).

4.2.35 Relative Importance of Education, Training and Experience Participants were asked to rank General education, EM education, EM training and EM experience in order of importance.

Q.: If I had to rank education, training and experience in order of importance for successful employment in the emergency management field, I would rank them as follows (with 1 being most important, 4 being least important):

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>17.26%</td>
<td>9.13%</td>
<td>11.41%</td>
<td>62.20%</td>
</tr>
<tr>
<td>Emergency Management Education</td>
<td>14.55%</td>
<td>24.54%</td>
<td>43.94%</td>
<td>16.98%</td>
</tr>
<tr>
<td>Emergency Management Training</td>
<td>16.12%</td>
<td>42.23%</td>
<td>31.95%</td>
<td>9.70%</td>
</tr>
<tr>
<td>Emergency Management Experience</td>
<td>52.07%</td>
<td>24.11%</td>
<td>12.70%</td>
<td>11.13%</td>
</tr>
</tbody>
</table>

Table 21: Relative Importance of Education, Training and Experience

Comment: Experience is seen as the most important attribute in EM practice. Interestingly, 62% believed that General Education is the least important attribute (and 17% thought it the most important), while 52% thought EM experience was most important and 11% thought it was least important.
4.2.36 Importance of Various Attributes of a Profession. Participants were asked to rank in order of importance a series of professional attributes which I extracted from my study of the literature about professionalism.

Q.: How important are the following attributes of a profession as defined, to any prospective Emergency Management profession?

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Essential %</th>
<th>Very Important %</th>
<th>Important %</th>
<th>Slightly Important %</th>
<th>Not Important %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery of a complex body of knowledge and skills</td>
<td>28.32%</td>
<td>41.74%</td>
<td>25.22%</td>
<td>4.57%</td>
<td>0.15%</td>
</tr>
<tr>
<td>A commitment to competence</td>
<td>46.90%</td>
<td>41.45%</td>
<td>11.06%</td>
<td>0.44%</td>
<td>0.15%</td>
</tr>
<tr>
<td>A commitment to integrity</td>
<td>55.75%</td>
<td>31.86%</td>
<td>11.65%</td>
<td>0.59%</td>
<td>0.15%</td>
</tr>
<tr>
<td>A commitment to morality</td>
<td>47.20%</td>
<td>33.92%</td>
<td>16.52%</td>
<td>1.77%</td>
<td>0.59%</td>
</tr>
<tr>
<td>A commitment to altruism</td>
<td>22.86%</td>
<td>38.50%</td>
<td>29.94%</td>
<td>6.64%</td>
<td>2.06%</td>
</tr>
<tr>
<td>Promotion of the public good</td>
<td>42.92%</td>
<td>40.56%</td>
<td>14.31%</td>
<td>2.06%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Autonomy of practice</td>
<td>15.04%</td>
<td>43.36%</td>
<td>31.42%</td>
<td>7.52%</td>
<td>2.65%</td>
</tr>
<tr>
<td>Adherence to a social contract</td>
<td>19.32%</td>
<td>45.28%</td>
<td>29.06%</td>
<td>5.16%</td>
<td>1.18%</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>28.47%</td>
<td>41.59%</td>
<td>22.86%</td>
<td>5.16%</td>
<td>1.92%</td>
</tr>
<tr>
<td>Service to others</td>
<td>44.54%</td>
<td>37.91%</td>
<td>15.93%</td>
<td>1.47%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Accountability to those served and to society</td>
<td>57.08%</td>
<td>31.27%</td>
<td>10.03%</td>
<td>1.33%</td>
<td>0.29%</td>
</tr>
</tbody>
</table>

Table 22: How important are the following attributes of a profession as defined, to any prospective Emergency Management profession?

Comment. In order of importance, the most important professional attributes were:

- Accountability to those served and to society (57.1%),
- A commitment to integrity (55.7%),
- A commitment to morality (47.2%)
- A commitment to competence (46.9%),
- Service to others, (44.5%) and
- Promotion of the public good (42.9%).

Participants were asked to suggest other professional attributes which they thought were important. They included:

- Effective leadership (with a number of sub-sets of what might be considered good leadership attributes),
- Ongoing learning, study, training, continuous improvement, and
- Evidence-based decision making.
“Resilience, empathy, calm, clear thinking, leadership, flexibility, lack of ego, ability to communicate, authenticity, humanity, decisiveness, willingness to listen, client focussed, energetic, project management skills”

Anonymous Survey Respondent No. 441

4.2.37 Importance of a Further Set of Professional Attributes. Participants were asked to rate the importance of a further set of professional attributes as identified in my literature review.

Q.: A review of the literature reflects some other characteristics which might be important to identify a profession. How important are the following attributes of a profession to any prospective Emergency Management profession?

<table>
<thead>
<tr>
<th></th>
<th>Essential</th>
<th>Very Important</th>
<th>Important</th>
<th>Slightly Important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code of Conduct</td>
<td>48.23%</td>
<td>35.99%</td>
<td>13.27%</td>
<td>2.06%</td>
<td>0.44%</td>
</tr>
<tr>
<td>Tertiary Education/Training</td>
<td>13.27%</td>
<td>35.99%</td>
<td>36.73%</td>
<td>12.54%</td>
<td>1.47%</td>
</tr>
<tr>
<td>Continuous Professional Development Program</td>
<td>39.53%</td>
<td>45.13%</td>
<td>14.31%</td>
<td>1.03%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Core of Knowledge</td>
<td>37.17%</td>
<td>48.97%</td>
<td>13.42%</td>
<td>0.44%</td>
<td>0.00%</td>
</tr>
<tr>
<td>A professional Association</td>
<td>9.14%</td>
<td>21.83%</td>
<td>36.14%</td>
<td>26.40%</td>
<td>6.49%</td>
</tr>
<tr>
<td>Controlled Membership</td>
<td>6.64%</td>
<td>17.26%</td>
<td>36.14%</td>
<td>28.76%</td>
<td>11.21%</td>
</tr>
<tr>
<td>Defined Standards of Practice</td>
<td>30.09%</td>
<td>45.13%</td>
<td>21.68%</td>
<td>2.95%</td>
<td>0.15%</td>
</tr>
<tr>
<td>Accountable to Government</td>
<td>28.47%</td>
<td>37.32%</td>
<td>23.89%</td>
<td>8.55%</td>
<td>1.77%</td>
</tr>
<tr>
<td>Accountable to Fellow Members</td>
<td>34.96%</td>
<td>36.87%</td>
<td>21.39%</td>
<td>5.31%</td>
<td>1.47%</td>
</tr>
<tr>
<td>Accountable to the Community</td>
<td>56.19%</td>
<td>31.12%</td>
<td>11.65%</td>
<td>1.03%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Provide a Supportive Environment in which to practice EM</td>
<td>50.15%</td>
<td>39.09%</td>
<td>9.14%</td>
<td>1.62%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Table 23: How important are the following further attributes of a profession as defined, to any prospective Emergency Management profession?

Comment: In order of importance, the 6 most important professional attributes identified from this list were:
• Accountable to the community (56.2%),
• Provide a supportive environment in which to practice emergency management (50.1%),
• Code of conduct (48.2%),
• A continuous professional development program (39.5%),
• Core of knowledge (37.1%), and
• Accountable to fellow members (35.0%).

Interestingly, the emphasis placed on EMs’ accountability to communities contrasts with the perspective of some commentators who suggest that there is no role for EMs in contributing to the resilience of communities.

I am very conscious of the importance that communities play in building their capability and capacity in the face of disasters. However, EMs are required to contribute to and in some cases lead the development of communities’ resilience in the context of the all-important ‘shared responsibility’ called for in the National Resilience Framework. Documentation published for them by Victoria’s Emergency Management Commissioner, including the Community Resilience Framework for Emergency Management and Resilient Recovery provide guidance for EMs in this role. Nevertheless, in any hierarchy, the community’s contribution outweighs that of the emergency services. That is the essence of all of the work done by myself and others in MUDRI and others in the sector.

However, the skills and experience required of communities to strengthen their resilience in these areas are NOT the topic of this thesis and lie well outside its scope.

Rather, my research focuses on those aspects of emergency services workers which might ASSIST communities in this endeavour.

Similarly, I do not suggest that the endeavours of emergency service workers are the SOLE source of community resilience, nor that those endeavours will BY THEMSELVES enable policy makers to write better EM or resilience policy.

Again, participants offered additional professional attributes that could constitute a prospective EM profession:

• Individual accountability,
• Networking,
• People management,
• Empathy,
• Innovation, and
• Proactive culture.

4.2.38 Other Comments Concerning the Professionalisation of EM in Australia.
Participants were asked to provide any other comments they might have regarding EM in Australia.
Q.: Do you have any other comments you would like to make concerning the professionalisation of emergency management in Australia?

Comment: While a broad range of responses was provided in this ‘free-range’ opportunity, 387 stated that they had nothing further to add.

Analysis of the responses identified some recurring themes:

- Education and Training,
- The necessity for clarity and definition of EM roles,
- A genuine ‘all-hazard, PPRR’ approach to EM,
- Gender equity,
- The necessity for an appropriate governing body, and
- The importance of volunteers.

4.2.39 Reflection on Survey Responses

The data provided by the analysis of the online survey outcomes, while going some way to identifying Australia’s EMs and their roles as professionals, left open a number of issues for further clarification. I pursued them through a series of interviews. The issues are defined in the interview question list at Attachment 4.

4.3 Interview Results

In order to avoid undue bias in my research, I undertook to triangulate my data gathering. One arm of that triangulation was the conduct of a number of semi-structured interviews with a range of practicing emergency managers. The objective for my interviews was to have a face-to-face engagement with participants who could provide some insight into the anomalies which I detected from analysis of my survey, to confirm trends from the survey and to expand on the concepts proposed in the survey.

4.3.1 Interviewee Selection

I selected interviewees to represent a cross-section of views from the perspective of gender, experience, age and seniority. See section 3.4 for selection processes.

I consulted with my supervisors and chose, as a convenience sample, eight participants from my networks who I knew could offer different insights through lenses of age, gender, seniority, experience, agency, geographic location and type of employment.

4.4.2 Process

A second ethics approval was granted for this phase of data collection. The questions chosen to be put to interviewees were based on the findings and anomalies which emerged from the survey. Documentation and questions used for the interviews are at Attachment 4. Interviewees were provided with background information about the research and about professionalisation. They were asked to sign the consent form. All did. They were then asked a semi-structured series of
questions, with the opportunity for expansion of ideas and clarification and additional questions from the researcher. Each interview lasted for approximately one hour and was voice-recorded. I later summarised the responses from the recordings and the consequential analysis is recorded in the following paragraphs.

4.4 Interview Findings

I collated the responses of the interviewees, and grouped them under a number of headings taken from the semi-structured questions I asked and informed by the issues identified in the online survey. I based my thematic analysis on the model proposed by Shenton (2004)—see section 3.4.3. I attempted to draw out patterns from the individuals’ responses. I asked a mix of hypothetical, provocative, interpretative and leading questions. I sought their experiences, their opinions, their feelings, their knowledge and their inputs. The semi-structured nature of the questioning, together with my deliberate attempt to be a flexible, responsive, adaptive and reflective listener created an environment by which the interviewees’ stories and their lived experiences were able to be drawn together to provide some generalisable insight into their individual perspectives of professionalism in EM. They provided me with both a priori and emergent issues. This approach enabled me to combine analysis of both the content and the narrative of the data collected.

I used their responses to group the data and then identified similarities and differences. I sorted this data into a framework reflected by the question headings in the following paragraphs. This descriptive analysis facilitated the process of correlating the data from the online survey and the interviews.

4.4.1 Completed the Survey?

Most, but not all of the 8 interviewees advised me that they had completed the survey. Their interview responses provided a broad range of insights similar to that reflected in the survey data.

4.4.2 Defining Characteristics of a Profession?

All interviewees agreed that there were a number of essential elements of a profession:

- Core of knowledge (7),
- Standards of performance (6),
- Development opportunities including ongoing education and professional development (6),
- Values/ethics\(^3\) (5),
- Forum for exchange of ideas/ best practice/ lessons learned (4),
- Advocacy (3),
- Creation and maintenance of networks (2),

\(^3\) One interviewee outlined perceived difficulties in devising an agreed set of values for an EM profession, given the potential conflicts between the differing values espoused by the range of bodies involved (ie. The Victorian Public Service values; the respective Agency values; Union values; and individuals’ values).
and a number of others such as a defined set of qualities and skills; discipline; collegiality; commitment; a critical mass of eligible personnel; a clear vision and purpose. One interviewee believed that it was important for an Oath to be administered to all.

All believed that some of these traits are currently exhibited within the sector.

Just as in the survey there was no clear agreement across the board on what were the essential elements of a prospective EM profession.

4.4.3 Does the EM Sector Exhibit the Characteristics of a Profession?

All agreed that there is a general feeling in the sector that EM is a profession, exhibiting professional characteristics but there is no agreement as to what that actually means. There was general agreement that such a profession needs to take into account the broad range of possible members, but no clear view as to what that may look like.

4.4.4 What would such a profession need to look like?

There was a strong feeling that an EM profession should avoid becoming the type of profession which is seen as ‘just another club’, and that, above all, it must offer an equitable service to its members and should avoid ‘silos’ of membership such as that between volunteers and paid employees. In attempting to ensure that state, some interviewees attempted to define different ‘levels’ or ‘classes’ of membership but struggled to define a system which would not cause further divisions and exclusions.

A common theme was the difficulty in teasing out who would be a prospective member of an EM professional body. Some suggested that anyone who has a role in any of the Preparation, Prevention, Response, Recovery roles would qualify. Others thought there should be strict criteria built around higher education qualifications.

4.4.5 What needs to be done to make EM a Profession?

One interviewee suggested:

“*It would be essential in creating an EM profession that the necessary changes are introduced slowly, otherwise fractures would occur*” (Interviewee # 2).

There was wide agreement that while at one level there should be some form of ‘exclusivity’ in membership, such a body should avoid becoming a ‘club’, and that all efforts should be made to avoid fragmentation of the sector

“*between those in the in-crowd and those not*” (Interviewee # 4).

A concerted effort needs to be implemented to introduce and foster a culture and practice of continuous, equitable, structured education and training opportunities for prospective members of an EM profession. This ongoing learning must be
complemented by the creation of overt forums and avenues for exchanges of ideas and information on-line and face-to-face.

“I’m very conscious that there must be someone out there struggling with the same issues as me and my staff, but I don’t have the time to search for ways of linking up with them – even just to ‘chew the fat’” (Interviewee # 7).

4.4.6 Are there advantages/disadvantages to being in a profession?

All expressed encouragement for the concept of a profession.

“It has to help not only ourselves, but also the community if we have professional standards, career options and support structures” (Interviewee # 3).

4.4.7 Need for a Professional Association?

There was a recognition among interviewees that the creation and maintenance of a profession

“... couldn’t be left in the hands of the existing agencies – that would be a disaster!” (Interviewee # 1).

A number of interviewees offered the view that at least initially, Emergency Management Victoria or Emergency Management Australia would be appropriate bodies best placed to pick up the challenge of pursuing the establishment of a professional association. There was agreement that:

“Someone needs to begin the process” (Interviewee #6).

Perhaps it would need to be an iterative process:

“because we are not in a position to look like the CPA or AMA yet, not by a long shot!” (Interviewee # 6).

Nevertheless, at least three of the interviewees expressed very strongly and very eloquently their fears that any constructive move towards establishing a professional association of emergency managers was doomed, given the:

“toxic industrial environment” (Interviewee # 3),

particularly in the fire services. Restrictive, archaic limitations placed on flexibility of careers, lateral recruitment, access for all to training and education opportunities and the (in some quarters) as yet unresolved tension between volunteers and ‘paid/career’ emergency managers militate against any progress towards creation of a professional body in the foreseeable future.

4.4.8 Gender

In response to the question asking about gender issues in the sector, interestingly, three of the four female interviewees suggested that they had personally not
suffered from any gender bias in their careers. Nevertheless, they and all other interviewees believed that it does exist

My favourite quote:

“Hell yes!!” (Interviewee # 8)

and that there needs to be more effort made to establish gender balance in the EM world.

4.4.9 Changes in EM at a professional level?

Interviewees identified changes to the manner in which volunteers are employed and valued as one of the major changes required before EM could be seen as a truly professional organisation. Other changes identified the importance of introducing/amending legislation so that the responsibilities of agencies are clearly defined, along with guaranteed levels of resourcing.

One interviewee was very vocal in expressing the belief that the EM community needs to pay much more attention to the role of health in EM.

4.4.10 Career Structures in an EM Profession

When asked about the trend for emergency managers to have entered the sector as a second (or later) career, most thought it was a particular strength of the sector because of the breadth of extra knowledge, experience and ‘life-skills’ that were brought to bear. An EM profession should take full cognisance of that aspect. Nevertheless, interviewees thought that there was a recognition that avenues must exist for direct entry, together with opportunities for recruits to follow a clear, well-defined career path. They believed that the sector is a long way from being able to attract school-leavers or new tertiary graduates in any numbers. There was a strong belief that an EM profession should act on that as a priority

“After all, the current generation won’t be around forever!” (Interviewee # 3)

and

“These young kids are brighter than we ever were. We need to tap into their skills, energy and enthusiasm” (Interviewee # 7).

4.4.11 Tertiary Level Education Programs

In advocating a structured, ongoing learning role for an EM profession, all interviewees reinforced the importance of a well-defined, relevant, accessible suite of tertiary study opportunities, linked with an urgency for more avenues for evidence-based research to inform policy and decision-making.

“The CRC has raised our awareness in some areas about the importance of research, but we’ve got to do much more of it” (Interviewee # 5).
4.4.12 Accreditation

Some interviewees exhibited a level of uncertainty about the role of accreditation in professionalisation. While a number recognised that it was (or could be) an enabler, or at least a part of professionalisation, a few thought that the terms were interchangeable. None of the interviewees believed that the existing accreditation models (IAEM, AFAC) satisfied the need for Australia’s EM professionalisation. Similarly, all interviewees felt that existing associations did not yet satisfy the requirements of a comprehensive, modern, all-agency, all-hazard professional association.

4.5 Reflection on Interviews

Semi-structured interviews were conducted to correlate, reinforce, complement and validate data retrieved from the Survey. In general, interviewees’ inputs confirmed much of the survey data and highlighted many of the same anomalies that surfaced in that process.

I was pleasantly surprised by the general uniformity of reaction to the various issues that I teased out, based on responses to the survey. There were no ‘Eureka’ proposals during the interviews, neither from the point of view of previously unexplored topics, nor of ‘answers to the problems’. At one level, the fact that respondents generally did not raise any other issues beyond those covered in the survey and the interview questions was perhaps a validation of the completeness of the survey. I took some reassurance that I had succeeded in exploring most of the issues concerning the professionalisation of Australia’s emergency managers, and it gave me some confidence that my literature review was sufficiently exhaustive to identify all of those issues.

Interviewees agreed that if a prospective professional association were to exist, its main contributions would lie in: a bringing-together of the various ‘tribes’ in EM; in providing a forum for open exchanges of ideas, of information, of lessons-learned; in advocacy of the interests and causes of EM to policy and decision makers; and in providing qualifications and pathways to some forms of certification/accreditation, qualification and ongoing professional development. There was agreement that EM could be ready to be deemed a profession and that steps should be taken by an appropriate authority to instigate a relevant association in some form.

4.6 Summary

This Chapter has outlined the data collated from two of my three-way research methods: the online survey; and the interviews. Participants provided an array of data from basic demographic information about emergency managers in Australia to their perspectives on what were the common requirements for the establishment of an EM profession and their opinions regarding the ‘readiness’ of the sector for professionalisation.

In this unique collection of data about Australia’s emergency managers, the demographic information, for the first time, gives us a snapshot of their age, gender, salaries, experience, education and qualifications. Their work positions within their organisations, together with an insight into their employment histories, and whether or not they are full-time or part-
time emergency managers are also defined. The data has also shown their attitudes to certification programs and opportunities for further education and training. Participants’ views regarding the balance between experience and qualifications have been recorded, together with their views on what measures would be required to establish EM as a recognised profession. The requisite properties of such a profession, together with their views regarding what a professional association might look like provide important insights.

Discussion of this data and its implications follows in the next Chapter.
CHAPTER 5: DISCUSSION

“EM is a broad term and covers many ‘professions’. I suggest we should consider if EM is a profession or is it a collective noun? For example, ‘public servant’ is a collective noun comprising many professions.”

Anonymous survey respondent No. 522

5.1 Interpretation of the Findings

This Chapter discusses and summarises the findings of the previous Chapter and addresses the data in the light of the research question and the literature review and my conceptual framework of professionalism.

5.1.1 Primary Demographic Information

In many ways, this research has shown that the emergency management sector is heterogeneous. Salaries vary considerably, as do the ages of emergency managers. Some work part-time, some work full-time, some are responsible for other duties than their EM responsibilities. Education and training differs between every single emergency manager.

On the other hand, there is a distinct homogeneity among emergency managers as well. A large proportion of them are older males. A large percentage are response-oriented. Most have come to EM as a second (or later) career. Most are employed in full-time positions, and most work in State government roles.

This section answers an important part of my research question – Who are the EMs in Australia?’

5.1.1.1 Gender

There are more men than women in senior roles in the sector. Much has been written on the detriment that this gender imbalance brings to this and any other similar sector (e.g. Stamarski & Son Hing 2015).

The data echoes the findings of Debra Parkinson and her team from Women’s Health Goulburn North-East in the research they did for the Department of Environment, Land, Water & Planning “Women in Fire and Emergency Leadership Roles” (Parkinson, Duncan & Hedger 2016). They found that across six Victorian emergency service organisations, a total of 10,876 staff members are employed in paid positions, 6,954 (64 per cent) of whom are male and 3,918 (36 per cent) of whom are female (reflecting my findings). The gender composition within each organisation varies considerably, with CFA and MFB employing upwards of 70 per cent men, while EMV and ESTA (the agency responsible for the fielding of 000 calls) employ higher proportions of female than male staff.

Some steps have been taken to address gender inequity in this sector, but my own years of experience remind me that it is a prolonged battle against some
strongly-entrenched male-privilege attitudes that will require ongoing courage and innovation by leaders at all levels to overcome.

Nevertheless, the number is still well short of the desirable if aspirational 50% figure. It is worth noting that in 2017, Ambulance Victoria has proved that it can be done, by achieving a 47% female gender balance in its ranks (Government of Victoria 2017). Interestingly, it took 30 years for this milestone to be reached from the time of the first female paramedic, underlining the fact that such change takes a long time!

5.1.1.2 Age

EMs are generally of an ‘older’ generation. This leads me to surmise that very few are being ‘groomed’/apprenticed/inducted at a younger age. It is an indication that there is no formal ‘pipeline’ to induct emergency managers into a structured career path. The literature points out that many other professions have invested heavily in such programs, including ‘apprenticeships’, internships, talent spotting, fast-tracking, lateral recruitment. This would appear not to be the case in the EM sector. What happens when all of the current ‘older’ EMs all go? Has the sector paid attention to succession planning? Once having come to emergency management (as a second or later career in many cases) participants have tended to stay. There is a log-jam at the top end of the ranks of emergency management workers. In the not too distant future a large percentage of them will retire over a very short space of time. This imminent, sudden loss of significant corporate memory and experience presents a significant potential problem for EM leaders and work-force planners. Several contributors to the literature referred to in my literature review reflect that this concern is shared in other countries e.g. UK, USA.

5.1.1.3 Salary/Seniority

The higher salaries of a large number of EMs compared with the national Australian Minimum Wage of $34,980 (Australian Government, 2016) reflect their general levels of seniority and expertise, triggering comparisons with salaries of equivalent other professions. In essence, the EMs in my sample are relatively well paid.

5.1.1.4 Experience

The positive aspect of the fact that EMs see themselves as, and are, an experienced workforce means that a wealth of corporate knowledge is available in the sector. The downside is that there may be a reluctance to change and to grasp new initiatives. The general longevity of EMs in the sector triggers similar considerations. Interestingly, the fact that there is generally considerable mobility within the sector rather than outside it, is something of a mixed blessing.
5.1.1.5 Education/Training/Qualifications

A significant percentage of EMs have brought with them from other sectors the breadth of thinking and flexibility of thought gained by tertiary studies in a wide range of non-EM fields, enriching the EM decision-making environment. The significantly smaller percentage of EM graduates dilutes this potential strength. The large numbers who express a desire to attain higher levels of qualifications is a positive phenomenon.

The fact that more than one third (34.57%) of participants have no emergency management qualification other than an in-house, non-award qualification speaks poorly of a system which does not cater in any structured way for a universal, recognised, authorised, industry-sponsored program of education and training for its workers. In stark contrast with the 43% who have brought non-emergency management graduate and post-graduate qualifications from previous employment, only 11% of participants have been given or taken up the opportunity to achieve such emergency management qualifications. Interestingly, an anomalous 82% of respondents believe they are highly or moderately educated, suggesting that there are differing perceptions of what those terms mean in the sector. It is an indictment on the sector and goes some way to underline my contention earlier in this thesis that EM may well be seen as not valuing higher education and learning. It means that one of the pre-requisites for the creation of a profession may be missing. Some participants recognised that this could be a sign that the sector is not yet ready to be a profession. On the other hand, it may just highlight that many have not had access to this level of training. Fitzgerald (2017) and Crawley (2016) highlight this issue at some length. Further research would resolve this matter.

5.1.2 Employment Information

Unsurprisingly, most Australian EMs work in State/Territory jurisdictions, with the next largest cohort working for local governments. This sets them apart from EMs from other countries (UK, USA) as explored in my literature review. This predicates a ‘more local’ perspective on managing disasters, as opposed to a national perspective. This may lead to a more ‘parochial’ or ‘tactical’ approach, rather than a strategic one. The vexed problem of State/Federal responsibilities in EM was beyond the scope of this paper. Nevertheless, research is required into what measures particularly to do with legislation and national policies may be required to reinforce the EM profession.

A significant number of participants were from Victoria. My years of experience at Federal level, together with my wide network of inter-jurisdictional colleagues enable me to extrapolate the inputs of Victorian EMs to those across Australia. This should be tested through further research, particularly focussed on the discrete jurisdictions to identify whether there are regional/State differences.
The majority of people who describe themselves as emergency managers are in middle/senior level management positions. As a researcher, it tells me that the survey did not ‘get out’ to many workers at lower levels, and so the opinions and perceptions reflected in the data are by nature skewed and may not present a totally representative view of the issues raised. Further discrepancies may also present themselves because it is my experience that many people self-define themselves as senior/middle managers when others may not apply that definition to them! On the other hand, it is my experience that many responders and more junior workers do not define themselves as emergency managers. This may create a ‘self-selection’ phenomenon. The literature has not been helpful in this regard, stressing that EMs are a very diverse range of responders, executives and managers. More research is required to clarify this situation. A survey of these different populations gauging their understanding of what their EM role consists of would shed more light on the issue and help delineate the separate skills and knowledge required by each.

Nevertheless, most EMs have come to the sector having worked in another sector first. Some have belonged to other defined professions. Because they work in a broad range of employment streams they exhibit a smorgasbord of vocational interests, expertise and skills. Once again, as reflected in the literature, the plethora of titles and job descriptions makes it very difficult to create a clear definition or understanding of what constitutes an emergency manager. Similarly, the fact that up to 50% of EMs have responsibilities other than EM in their employed roles confuses endeavours to pin down exactly who is and who is not an emergency manager. This, too, is reflected in much of the literature, as described in my literature review.

The comparatively high percentage of online survey participants from the health sector is probably an aberration of the distribution of the survey, rather than an indication of the overall composition of the sector. My personal theories of why the health sector featured so strongly include:

- The health sector is accustomed to being surveyed – perhaps more than the EM sector;
- I have particularly strong networks in the health sector built up over years. Similarly, MUDRI has strong connections with the sector; and
- The health sector is very well versed in EM practices and procedures AND are, particularly recently, very aware of professionalisation issues.

5.1.3 Professional Engagement

Although more than two thirds of EMs have not sought or attained any form of professional certification, an even greater number believe EMs should seek such a qualification. There is an obvious appetite for an organisation to provide such an avenue for professional improvement. This stated desire is echoed in further findings which imply the need for a universal, structured learning and training program for EMs in a general education context and in specific EM skills and
knowledge. This would go some way to answering one of my secondary research questions regarding the readiness of the sector for a Professional Association to provide this service. Some embryonic endeavours have been made by AFAC and AIDR to provide forums, conferences, workshops for the informal professional development of EMs. EMs do attend these events, but it is by no means a universal phenomenon, and it does not represent a formal, structured approach. On the other hand, EMs’ general satisfaction with their levels of experience in the sector highlight where the current emphasis lies in EMs’ professional development.

The literature speaks of the popularity, even dependence, on certification programs particularly in other countries. In the USA where IAEM in particular, and other professional associations reflect the demands of the sector, EMs place significant stock in certification. In fact my experience is that certification has become almost an essential qualification for recruitment into EM at every level in that country and some others. Nevertheless, the Oceania Chapter of IAEM services Australian members, but their certification process has not been strongly adopted.

Although more than 20% of participants reported that they had gained AFAC Certification I suspect that many were confused (perhaps by the wording of the question) and reported that they were certified AIIMS practitioners, rather than having undertaken the AFAC Professional Development certification. As at 28 August 2017, only 38 EMs across Australia were registered as having been granted AFAC certification as Certified Incident Controllers (18 NSW; 7 WA; 3 Qld; 2 SA; 2 VIC; 2 Federal Govt.; 1 TAS; 1 ACT; 1 NT; 1 NZ) (AFAC 2017b).

This is not to say that a certification process is not a worthwhile pursuit, rather it identifies that there are none that are widely accepted as appropriate, accessible or useful for the broad church that is Australian emergency managers.

Perhaps one of the reasons for this differing desire by EMs is caused by the fact that a majority of Australian EMs share their time between EM and other responsibilities, or are only required to apply their EM knowledge and experience ‘when the balloon goes up’. It would be understandable in these instances if EMs could see limited return for the investment of time and resources in a certification program. Further research would be needed to resolve this issue. Nevertheless, it does provide an indication that many Australian EMs are not yet ready to make the commitment required to become a profession.

5.1.4 Professional Reflection and Opinion

EMs’ levels of satisfaction/dissatisfaction with their levels of experience, general education and specific EM training reinforce the desire for clearly defined programs of education and training. They call for greater equity and opportunities in access to higher level tertiary General and EM education programs. They also highlight a need for more standardised, accessible, progressive EM training programs which, contrary to current practice in most cases, are not standardised. The fact that a significant number of Australian EMs report having received no training in such basic EM skills
and concepts as Risk Management, Principles of EM and Basic EM militates against any universal level of professional competence and perhaps suggests that EMs are not yet ready to call themselves a profession.

In identifying what EM training they believe they and others require, the fact that there is an anomaly between what they have actually undertaken and what they propose suggests lack of clarity in what is required. This may be due to a lack of standardisation of training programs as they exist, or even the absence of clear job and skill descriptions on the part of many of the practitioners.

In simplistic terms, the majority of emergency managers are recruited through a lateral, ‘sideways’ process. In discussions with my colleagues over the years it has often been observed that, unlike in the USA, Australian high school students rarely say “I’m going to uni to get a degree and become an emergency manager”. This helps explain why there is a dearth of EM Bachelor degree courses delivered in Australian universities. It highlights the need for a clearly defined career path. It possibly reinforces the need for a comprehensive Internship program to help identify prospective recruits and to provide prospective recruits with an insight into what a career in EM entails.

However, the preponderance of opinion emphasises the priority of EM experience for participants’ practice. It implies the need for an accessible, evidence-based program of exposure for practitioners to a well-defined set of structured experiences in a career path. This is outlined in other professions in a sequence of hurdles/competencies/exercises/certifications which must be completed by participants before they are recognised by or advance in their profession. Documentation of ‘experience achievements’ is more difficult than that of study or training documentation, but is achieved in some vocations and professions through use of workbooks or equivalent. Again, a professional association could proselytise such a regime.

5.1.5 The Professionalisation of Emergency Management in Australia

There is a general acceptance among EMs that any EM profession would be based on a foundation of the key attributes as reflected in most other professions:

- Accountability;
- Integrity;
- Morality;
- Competence;
- Advocacy;
- Values and ethics; and
- Service and promotion of the public good.

There is general agreement that those traits are already evident in the sector, and would merely need to be codified, recorded and perhaps attested to. Just as strongly advocated were other pre-requisites for successful establishment of a
profession such as a process of ongoing learning, study, training and continuous improvement at tertiary and vocational levels. Interestingly, while there was an unsurprising agreement regarding the value of their EM training and experience as recognised in the literature, some ambivalence was expressed by some participants about the relevance or impact of their formal general education on their recruitment or promotion prospects. This would not be the determination of many practitioners in other professions.

Further suggested pre-requisites included: effective leadership; a core of knowledge; gender and diversity equity; a code of conduct; and accountability to colleagues, to government, to the communities they serve. This was not about protecting the profession, but about providing service to the community.

Many EMs reiterated that the elements of most of those factors already exist, to a greater or lesser extent, in the sector. In this context, it would appear that they believe that they do constitute a profession in practice, if not in official nomenclature.

They believed that before a professional association were to be successfully established it would require the creation of a governing body in some form or another, a comprehensive consultation process, particularly to establish who the profession would encompass as its membership, and political support. There was also a strong belief that to ensure industrial relations and resourcing issues were addressed, that government/political support was essential. There is a strong appetite for this to occur.

The number of participants who raised issues regarding the role/place of volunteers in an EM profession underline the importance of structuring such a profession in such a way as to be inclusive of volunteers and to overtly value their contribution. I was unable to make major observations in this regard because of the small number of volunteers who provided input. Further more focussed research will be required to address this important topic. Recent (2018) issues around separating volunteers from paid staff in different fire agencies, together with volunteer issues in Victoria’s SES indicate that comprehensive samplings of attitudes and culture among both volunteer and paid EMs would be a vital step in helping to resolve some seemingly imponderable issues.

“EM has two streams in Australia (operational responders/managers and academic/executives) that barely interact. There is a critical need for a professional body to bring these groups together and install relevance and operational content into tertiary education programs. Both groups can contribute much to the other but currently have little incentive to work together.”

Anonymous survey respondent No.444
5.2 Criteria of a Profession in the Australian EM Context

Using the data collected and this analysis, mindful of the attributes of a profession as it has been defined in this thesis, it is a useful exercise to see how the criteria for a profession as defined by James (2016) can be applied to Australian emergency managers. Such an exercise is particularly appropriate given that James has specified his insight into professional characteristics in the context of emergency managers, as opposed to more general professional specifications. His observations about humanitarian emergency managers translate easily to Australia’s EMs.

Establishment as a Livelihood. James (2016) suggests that:

“Professions involve a paid livelihood whereby work is undertaken in exchange for monetary compensation” (James 2016).

This raises two contradictions: (1) other ‘non-professions’ also constitute paid livelihoods; and (2) it belies the complication, particularly in EM, of volunteers who make up a significant percentage of the workforce. This second problem goes to the heart of “Who is an emergency manager and who is not?” Much of my literature review addressed this seminal issue. Significant research, discussion and consultation must be undertaken to clarify this seminal issue regarding the professionalisation of EM in Australia.

But James goes on to say that in the consideration of EM as a livelihood motivation is an important consideration. He identifies an ‘attitudinal’ element of professionalism that provides a ‘sense of calling’ among its membership. There is no doubt in my mind, from the responses to this research and from my own experience, that that ‘sense of calling’ is very strong in the ranks of Australia’s EMs. This would contribute to their ‘readiness’ to be a profession.

James remarks that:

“Professions have developed into careers with their own unique trajectories. Long periods of education and training, acceptance into the field (not just recruitment but also orientation and indoctrination), progression from worker to manager and then into retirement has been the hallmark of professions”.

While some aspects of this picture apply in the Australian EM sector, this research has shown that there is still some work to be done to enable EMs to identify a clear career path.

Organisation and Institutionalisation. James’s list of attributes that ensure a collective function of a group of professionals includes autonomy, self-regulation, knowledge sharing and development and mutual support. He believes that these attributes give them the ability to act independently and, at times, influence public policy. He suggests that this advocacy cannot be successfully prosecuted without a high degree of organisation. EM in Australia does not have that level of organisation. Advocacy of EM and public safety issues, while successfully achieved in some jurisdictions for some specific issues, is not universally
successful. A number of participants commented that the establishment of an EM professional association may overcome this shortfall.

**Legitimacy and Authority.** James (2016) suggests that the legitimacy and authority of an Australian EM profession would be based on two factors: common perception and authoritative recognition.

Common perception includes the creation of status symbols. Distinctive dress (uniforms, badges of rank), logos, purpose-built buildings and hardware (big-red-fire-trucks?) help distinguish EM professionals from ‘victims’ of disasters. Some Australian EMs can be identified by these symbols, but others don’t and won’t. Consideration of their use may help clarify the issues of identity of EM professionals.

Authoritative recognition comes from the establishment of norms, codes and standards. While they do exist in some areas of the sector, in the Australian EM professional context these could only be described as piece-meal. Significant effort must go to achieving a national set of all three before a profession can be born.

**Specialisation of Knowledge.** James (2016) believes that there are three ways in which professionals concentrate the subject matter around their field:

- “Comprehensive training for those entering the field;
- *Qualifications are awarded through a recognised process and documented with a certification, diploma or degree; and*
- *The emergence of specialised journals and publications.*”

The findings and analysis of this research would indicate that in none of these three ways has EM knowledge been comprehensively concentrated in Australia. While some steps have been initiated, there is much more to be done before it can be said that EM specialist knowledge is an indicator of the readiness of Australian EMs to be described as constituting a profession, as I asked in my research question.

### 5.2.1 Gaps in Australian EM Professionalism

From this identification of the criteria required for the establishment of an EM profession in Australia, the following gaps can be identified:

- Lack of national policy, standardisation and guidance for EM legislation and education and training programs,
- The role of volunteers in a profession,
- Definition of who is an emergency manager,
- Definition of the skills, knowledge and competencies of a professional EM,

---

The most recent/common example of this is the way in which various jurisdictions regularly fly in the face of advice and established practice of EM organisations by appointing ‘outsiders’ to conduct EM operations, overriding plans and processes put into place and practiced over many years. The Recovery operations in various major disasters (tropical cyclones, floods, bushfires) have been headed by government appointees ‘over the heads’ of recovery leaders, experts in their organisations.
• Absence of a body ready, willing and resourced to undertake the role of overseeing a professional association, and
• Consultation among EMs and other stakeholders on the desirability and efficacy of establishing a professional association.

5.3 Answers to Research Questions

As a result of my research, analysing data from my literature review, my online survey and my semi-structured interviews I have been able to answer my research question:

“In what ways do the profile, background, experience and qualifications of Australia’s emergency managers constitute a discrete emergency management profession?”

by addressing the secondary questions.

5.3.1 “Who are the emergency managers in Australia?”

The sample who participated in the research are generally more mature of age. One third of their ranks are females. They generally describe themselves as of managerial or executive level. They work mostly in State or Local Government bodies. Their salaries are generally well above the national average. Once becoming EMs, they generally stay in EM. They move around within the sector but generally stay for longer periods of time.

5.3.2 “What are their backgrounds, experience and qualifications and skills?”

They have generally come to EM from other vocations or areas of endeavour. Most of them who are tertiary qualified achieved that level of education outside EM. There is a very limited number with tertiary EM qualifications. Most have received some recognised vocational or in-house training, but there is no standardisation for individuals or across the sector of what that training package should be. EMs generally believe that they need further training and education, but again, there is no agreement as to what that should be. Their longevity within the sector means they are generally quite experienced, and they generally value experience over qualifications and individual skills.

5.3.3 “Do Australian emergency managers think they constitute a profession?”

Australian EMs believe they are professional in their service, but recognise that they are not an official profession. They believe that they collectively exhibit most if not all of the traits of similar professions. They generally have various ideas about what is required to take them the next step to become a recognised profession and most share a desire to contribute to that profession.

5.3.4 “Is there a case for a Professional Association for Australian emergency managers?”

An appetite exists in the sector for an organisation to take up the challenge of facilitating, implementing and maintaining a professional association. One clear advantage of having a multi-level association is that it would help identify who ARE
Australia’s emergency management practitioners. Nevertheless, registration might constitute a step too far.

A sound basis exists, based on values, leadership, commitment to service to the community, desire for skills and experience enhancement, for the creation of a suite of measures to incorporate such an association. The challenge lies in the who (will undertake the task?) and the what (should the association look like?)

5.4 Recommendations

As a result of my research, I offer the following recommendations:

- It is recommended that an appropriate national authority, perhaps Emergency Management Australia, accept the task of moving to establish or to auspice a professional association of Australian Emergency Managers, titled, perhaps, the Australian Association of Emergency Managers (AAEM). The objective would be, after the initial establishment, for transition to an arms-length, independent structure.
- To achieve that overarching outcome, it is recommended that the appropriate authority would:
  - Establish a Steering Group to ascertain the appetite for an AAEM.
  - If the response is positive, appoint a suitable Director/Executive Director/Chairman with appropriate support staff and resources.
  - Consult with other relevant professional associations (nationally and internationally) to ascertain best practice approaches.
  - Put in train a comprehensive consultation process of Australian EMs and other relevant stakeholders to form an agreed position on those issues listed at para 5.2.1 above as well as other administrative issues (fees, oaths, vision, objectives, etc.).
  - Undertake all relevant steps to enact the legal and corporate registration and recognition of the AAEM.
  - Undertake a comprehensive national education program extolling the virtues of the AAEM and implement a comprehensive recruiting drive.
  - Begin a coordinated campaign advocating with decision makers in all jurisdictions for improvements at all levels in the support required to maximise the public safety service provided by EMs to their communities.
  - Explore the establishment of a national recognition/certification system for EMs.
  - Nurture the environment for the development of the profession by publishing appropriate publications, (including AJEM), conducting conferences, forums, workshops, and by encouraging EM students.
  - Explore the expansion of tertiary education opportunities in the Australian setting to meet the framework outlined in the recent national standards (Fitzgerald G., Rego J., Ingham V. et al, 2017) – see Section 2.4.8.
- Expand on the good work being done by the Australian Institute for Disaster Resilience (AIDR 2017) in providing education scholarships to EM volunteers, by offering similar opportunities to ‘mainstream’ EMs.
- Fund additional research to help clarify issues in the sector.
- Be appropriately funded.

5.5 Limitations of the Study

There is no existing profile of who is an Australian emergency manager. Nor is there a data base of who they are. This meant that I am unable to say that I have given all Australian emergency managers the opportunity to contribute to my data collection. I know that I ‘missed’ many of them. The Victorian Auditor-General has identified the fact that no-one knows who is out there (Victorian Auditor-General’s Report 2014) – see Section 1.2.

My method, of necessity, combined non-probabilistic and convenience sampling. It was non-probabilistic in that it is not known how representative the sample is of the broader EM sector. It was a convenience sample in that I attempted to engage practitioners through their parent bodies (but not, it must be admitted, through ALL such bodies). The challenge was that it was difficult/impossible to gather the opinions of ALL emergency managers.

The response rate could not be easily or meaningfully calculated since the distribution is unknown.

Because there is no existing data base of emergency managers in Australia, I could not distribute my survey directly.

The very broad inclusion criterion was that participants were Australian and that they believed that they were employed in emergency management activities. This implied that most, if not all, would be self-selected. This has reinforced the prospect that I did not poll all Australian EMs.

Eventually, the ‘first-tier’ of participants, in passing the survey link to others, caused a snowball sampling. While this was a positive outcome, in that it ‘swept up’ many more participants, it meant that in spreading far and wide, the original inclusion criterion was degraded.

5.6 Potential Future Research

Given the limitations of the survey sample of this research, the next essential research should confirm these findings across a more demonstrably representative sample of Australian EMs.

Considerable research is required to bring some clarity to the definitional questions around the terms Emergency Management and Emergency Manager. Where do ‘sub-sets’ such as volunteers, responders, health workers, planners fit?

In that context, research should be conducted into the question of whether or not emergency managers are a discrete body of professionals (by whichever definition the term might be assigned) or are they a loose agglomeration of other, linked professions?
Further research could be conducted into the success (or otherwise) factors of other EM professional associations (however named) both nationally and internationally, with a view to gleaning lessons from their efforts.

Important research is begging to be done in identifying and codifying the suite of skills, knowledge, experience required of emergency managers. The next step would then research what education and training programs should be adopted to achieve them.

The evidence shows that the sector should move in this direction.
CHAPTER 6: CONCLUSION

“Transforming a trade into an occupation into a profession takes time.”

Anonymous survey respondent No. 585

This research set out to address the question of who are Australia’s emergency managers. This has never been done in Australia before. It considered them through the lens of professionalism. In doing so, this research identified much about their demographic make-up, it recorded their education and training levels and measured that against their EM experience. It traced their careers in EM and where they had come from.

My research recognised the difficulties inherent in the sector caused by the plethora of definitions of terms such as ‘disasters’, ‘emergencies’, ‘emergency managers’, ‘professions’ and others. In trying to gauge whether or not Australia’s EMs belong to a profession, it sought their advice and perspectives and compared their status to that of others who do belong to other established professions. It also queried whether there was a desire or a need for an EM professional association in some form or another.

This research leads me to the position that the Australian emergency management sector is still some way from being in a position to call itself a profession. In order to achieve that status, EM leaders of the sector have much work to do in addressing the standards, training and education levels required; in creating an equitable, attractive career progression within the sector; in providing inspirational, empathetic and demonstrable leadership; and in convincing the community, including our political masters, that investment in these measures will pay back a thousand-fold through an increase in the safety of all community members.

While a heavy onus lies with the leaders in the sector, in the spirit of ‘shared responsibility’ which lies at the heart of increased disaster/community resilience, the onus also lies with agencies, governments and emergency managers themselves either individually or collectively to grasp the nettle.

The experience of other professions shows that the changes proposed will take a long time. Further research is needed to flesh out some of the solutions, and, indeed, some of the problems.

But let’s get started!
REFERENCES


Alexander, D 2003, “Towards the development of standards in emergency management training and education”. Disaster Prevention and Management, vol.12, no.2


Cwiak, CL 2009, Strategies for success: the role of power and dependence in the emergency management professionalization process, North Dakota State University


Gustafson, JM 1982, “Professions as ‘callings’”, *Social Science Review*, vol.56, no.4

James, E 2016, “The professional humanitarian and the downsides of professionalisation”, *Disasters*, vol.40, no.2


Lincoln, YS & Guba, EG 1985, *Naturalistic inquiry*, Sage, Beverly Hills


McArdle, D & Archer, F 2011, “Is this the holy grail we have been waiting for in disaster management?”, *Journal of Emergency Primary Health Care*, vol.9 no.1


McEntire, DA 2015, *Disaster response and recovery*, 2nd edn, John Wiley and Sons, New Jersey


Osler, W 1906, Aequanimitas, with other addresses to medical students, nurses and practitioners of medicine, 3rd edn, McGraw-Hill Book Co., New York, NY


Patton, MQ 1990, Qualitative evaluation and research methods, 2nd edn, Sage, Newbury Park

Pearce, L 2000, An integrated approach for community hazard, impact, risk and vulnerability analysis, doctoral thesis, University of British Columbia


Rubin, CB 2000, Emergency management in the 21st century: coping with Bill Gates, Osama bin-Laden, and Hurricane Mitch. (Natural Hazards Research and Information Center Working Paper 104, based on presentation at the July 2000 Natural Hazards Workshop, Boulder, CO), Natural Hazards Research and Information Center, University of Colorado, Boulder CO


Schneider, RO 2013, Emergency management and sustainability: defining a profession, Charles C. Thomas Publisher, Springfield, Ill.


Stamarski, CS & Son Hing, LS 2015 Gender inequalities in the workplace: the effects of organizational structures, processes, practices, and decision makers’ sexism, Frontiers in Psychology, vol.6, p. 1400


<table>
<thead>
<tr>
<th>Attachment</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment 1</td>
<td>Advanced Professional Development Program</td>
</tr>
<tr>
<td>Attachment 2</td>
<td>Relevant Emergency Management Journals</td>
</tr>
<tr>
<td>Attachment 3</td>
<td>Survey Documentation and Questions</td>
</tr>
<tr>
<td>Attachment 4</td>
<td>Interview Documentation and Questions</td>
</tr>
</tbody>
</table>
ATTACHMENT 1

ADVANCED PROFESSIONAL DEVELOPMENT PROGRAM (APDP)

As part of the requirements for the award of the Monash University degree of Master of Philosophy I was required to complete 48 hours of professional development. This is the report of that professional development.

In recording the following APDP I have endeavoured to list activities that I would not normally have done if I was not undertaking a research degree. I had some difficulty isolating activities in both my university work and my other EM work, but the following is an attempt to do that. I have omitted countless hours of activities such as EM scenario exercises, various EM facilitated workshops, MUDRI Forums, research colloquia etc, all of which have made some contribution consciously or unconsciously to my research effort.

Monash University Skills Essentials Programs:

- **Finding Quality References: Introduction to Library Database Searching/ Preparation for Endnote.** 21 January 2014  4 hours
- **Software Packages for Statistics.** 14 May 2014  2 hours
- **Data Management.** 31 July 2014  2 hours
- **Writing about Qualitative Data: Building an Argument.** 18 September 2014  3 hours
- **Mind Mapping.** 22 September 2014  3 hours
- **MS Word 2010 - Setting up your Thesis: Styles, Table of Contents, figures and References.** 23 June 2015  3 hours
- **The Naked Presenter Workshop for HDRs and ECRs.** 23 November 2016  8 hours

Trial of Survey Tool:

I initiated, researched, prepared, implemented and analysed a survey for the Department of Education and Training at my own initiative to prepare me to undertake a Survey Monkey survey for my research. It collected data from several hundred schools regarding their response to the ‘bomb hoax’ events of February 2016. 40 hours

Miscellaneous:

- **MUARC Annual Lecture.** 4 March 2014  2 hours
- **How to make a Gantt Chart in Word.**
  [https://www.blinn.edu/labs/bryan/LC%20help/Making%20a%20Gantt%20Chart%20in%20Word.pdf](https://www.blinn.edu/labs/bryan/LC%20help/Making%20a%20Gantt%20Chart%20in%20Word.pdf)  4 hours
- **System Logic Mapping Review Workshop - Local Government and Community Sector (Conducted by DHHS).** 23 May 2014  3 hours
- **Gender and Disaster Task Force Meeting.** 30 May 2014  2 hours
- Assistance and advice to PhD student George Carayannopolous (Sydney Uni) researching how governments use the framework of whole of government to respond to large scale crises and emergencies. June 2014  6 hours
- **MAV-VCOSS Emergency Management Forum.** 13 June 2014  6 hours
• Prepared and presented paper based on early results of my research to the July 2016 Emergency Services Foundation Conference. 10 hours.
• Co-authored a chapter in an EM textbook:


• MUARC HDR Writing Workshop – Panel member. 2 December 2016 3 hours
• Reading (and sometimes forwarding) relevant Research Blogs (particularly The Research Degree Voodoo and The Research Whisperer). Circa 2 hours per week.
• Carried out “Unobtrusive Observation” of training presentations for evaluation of projects.

Conferences Attended:

• Asia Pacific Humanitarian Leadership Conference. April 2017. 24 hours
• Save the Children Australia Emergency Health Unit Learning Program and Launch. April 2017. 8 hours
• Emergency Services Foundation. July 2016. 16 hours
• Emergency Services Foundation. July 2015. 16 hours
• Emergency Services Foundation. July 2014. 16 hours
• Australian and New Zealand Disaster and Emergency Management Conference: Earth; Fire & Rain. 3-5 May 2015 24 hours

TOTAL: 205+ Hours

OBLIGATORY COURSE WORK UNITS

Although not part of my APDP, it is worth recording here that there were other ‘required activities’ to be completed before the award of the Masters degree. In particular, I was required to complete:

• MIR4110 Introduction to Disaster Preparedness and Management (credit granted);
• MIR4160 Disaster Resilience and Community Safety (credit granted);
• MIR5110 Responsible Research Practice and Project Management in Emergency and Disaster Settings; and
• MIR5120 Research and Evaluation in Disaster Preparedness and Management.
• Monash Graduate Research Induction (online)
• Faculty Induction
• Research Integrity (online)

REFLECTIONS ON MY ADVANCED PROFESSIONAL DEVELOPMENT (APDP) PROGRAM

My journey through this APDP project has been fascinating. I approached it with some trepidation given that I had limited exposure to the world of research and to academia. I was a little daunted, initially, by the prospect of having to complete a APDP. Without tooting my flute too much, I couldn’t imagine what EM activities I could do that were ‘new’.
Not that I know everything about EM, but I expected to struggle to find activities that would qualify. After I had completed/identified the requisite number of in-class and on-line units predominantly on research and evaluation methods I decided to use the Advanced Professional Development Program to expand on that information and seek other insights into the skills required for research, evaluation and other aspects of the academic life. I resolved to learn as much about this new environment as I could in the process.

I attended numerous ‘how-to’ post-graduate professional development programs. I found them all very useful, very well run, very appropriate. My frustration lay in my inability to find the time or the opportunity to put them into practice immediately after the courses. In the spirit of ‘Use it or lose it!’ I found when it was appropriate to apply the new skills I had lost most of them, even though I had the notes. For example, by the time I came to needing to use Endnote for my referencing/bibliography, I found I had forgotten everything I had learned. In an attempt to enrol in another course to ‘refresh’ these skills, I found the on-line booking system to be virtually impenetrable and/or courses were fully subscribed the moment they were announced. This difficulty with booking/attending other courses was a running cause for annoyance, frustration and despair for some of my fellow students, as well!. This is a distinct disadvantage of studying part-time.

I particularly enjoyed following the two academic research blogs that I found (The Research Whisperer and the Research Degree Voodoo). I found their various posts enlightening, stimulating, sometimes funny, always echoing familiar problems and generally challenging and rewarding. They were not only useful (to varying degrees) in my own research, but they stimulated me to continue to pursue my own long-held desire to publish a blog of my own. When I do actually get around to setting one up, they will provide inspiration and sound models.

I enjoyed lecturing (teaching?) to graduate students (made more rewarding by the broad range of nationalities represented), conducting tutorials, marking assignments, participating in and presenting to research colloquia and workshops. All of these new experiences not only gave me great joy, but they helped focus and sharpen my own work.

I was delighted to be presented with an opportunity (self-initiated!) to conduct a ‘trial’ survey as part of my day-job. It gave me much more confidence and saved a lot of grief, false starts and technical screw-ups when I did the ‘real’ one for my own research around the emergency managers. Again, this aspect of my PDP served me well in my ‘life-long-learning’ journey and also caused me to hone my own questioning and thinking processes which made my endeavours creating my own research survey much easier.

I enjoyed the new lens that my studies gave me to apply when I attended the various conferences. Besides my EM interest, I now found (find) that I approach presentations with a more accentuated awareness of the requirement for, and the tools used for, evidence-based statements, policies and approaches. Similarly, my ability to absorb, critically evaluate and take on board readings (from the daily newspaper to learned articles) was honed by my PDP activities.
As an aside, I have also developed a heightened awareness of the intricacies and concepts of professionalisation. Just last week I engaged my dentist in a 20-minute conversation about whether he saw himself as an Artisan or a Professional or both. I don’t think he charged me!

While I would still not dare to consider myself an academic, I am prepared to state that at the end (nearly!) of a 4-year journey, I now know a bit about research, about professionalisation and about what might be a way ahead for my emergency management colleagues. The PDP certainly contributed to that process.
ATTACHMENT 2

RELEVANT EMERGENCY MANAGEMENT JOURNALS

Australian Journal of Emergency Management
Australasian Journal of Disaster and Trauma Studies
Disaster Medicine and Public Health Preparedness
Disaster Prevention and Management Journal
Disasters
Disasters: The International Journal of Disaster Studies and Practice
International Journal of Mass Emergencies and Disasters
Journal of Advanced Nursing
Journal of Contingencies and Crisis Management
Journal of Disaster Research
Journal of Emergency Management
Journal of Emergency Primary Health Care
Journal of Traumatic Stress
Prehospital and Disaster Medicine
Social Science Review
ATTACHMENT 3

SURVEY DOCUMENTATION AND QUESTIONS

Welcome to My Survey

WHO ARE AUSTRALIA’S EMERGENCY MANAGERS?

Survey Description & Consent

The Monash University Disaster Resilience Initiative (MUDRI) is supervising an original research project aimed at learning more about emergency managers in Australia.

The project is a demographic survey of Australian emergency management personnel, and the results will contribute to a benchmark profile of this emerging profession in Australia. There is little research on who are Australia’s emergency managers and the results from this project will provide further insight to the current state of professionalisation of the field within Australia. As a person engaged in emergency management, you are invited to participate in this survey.

The researcher’s name is Dudley McArdle, and this project is part of the requirement for a Master’s Degree in Philosophy (Emergency Management and Community Resilience) at Monash University. If you have questions about this survey or about the research project contact Dudley at dfmca1@student.monash.edu. Dudley’s credentials with MUDRI can be established by emailing Emeritus Professor Frank Archer, MUDRI Program Head, at frank.archer@monash.edu. Dudley's co-researchers are: Emeritus Professor Frank Archer; Dr Caroline Spencer (Academic Coordinator, MUDRI); and Professor Frederick (Skip) Burkle (Harvard Humanitarian Initiative, Harvard School of Public Health).

This survey will be conducted in April/May 2016. There are 41 questions and the survey will take approximately 15-20 minutes to complete. The questions will ask you about your demographics and your background, experience, qualifications and skills. It will seek your opinions on basic matters pertaining to the professionalisation of emergency management such as how various skills and qualifications compare to your ideas about professions. There will be no personally identifiable information collected or presented. As this survey is designed to be completed only once per individual, the Survey Monkey platform will use your computer's cookies and user identifiers in order to verify that each survey response is from a unique user; none of this technical information is collected or retained and at no time is it available to the researcher or Monash University.

A copy of the final report of the survey will be published on the MUDRI website. A copy of the final report and the survey findings will also be available to key stakeholders. As a Survey participant, since your personal identification and contact information are not being collected or retained, there will not be any direct distribution of this report or its findings to survey participants. You are invited to monitor the MUDRI website where the findings will be made...
publicly accessible once the research project has been successfully completed. The findings will also be disseminated in one or more journal articles and conference presentations.

If you have any questions, please feel free to contact the researcher. This project has been approved by the Monash Human Ethics Committee.

The information you provide will be summarized, in totally de-identified form in which no individual can be identified, in the body of the final report. At no time will any specific result be attributed to an individual. All data will be kept strictly confidential and will be handled by and available only to the researchers. Although Monash University is supervising this project, at no time will Monash University have access to the raw data. The data collected through the Survey Monkey platform is hosted in Australia and therefore subject to Australian laws and jurisdiction; your survey responses are not processed or stored elsewhere. The data will be stored electronically, password protected and will only be accessible to the researchers. It will be retained electronically for a period of one year following submission of the final project report.

You are not compelled to participate in this research project. If you do choose to participate, you are free to withdraw at any time before submitting your survey responses without prejudice and any responses provided to that point will be automatically deleted as soon as you select the tab at the bottom of the final page to discard your responses and exit.

Choosing to continue with the survey will signify that you have read and understood this survey description and consent statement and that you provide your informed consent.

Thank you in advance for your time and willingness to participate.

1. Continue to Survey?
   ☐ Yes
   ☐ No

For the purpose of monitoring the survey sampling methodology, please identify how you received this invitation to participate (Check more than one if applicable):

☐ I received the invitation via my personal membership in an emergency management related professional association that distributed the invitation to its membership.
☐ I received the invitation via a formal emergency management body, organisation or institution that distributed the invitation to its members/employees/staff/volunteers/faculty/students/etc.
☐ I received the invitation directly from a friend or peer.
☐ I received the invitation at a MUDRI Forum.
☐ I received the invitation through my community network.
☐ I discovered the invitation via a media forum (eg. Newsletter, website, LinkedIn).
☐ Other (please specify) _____________________________________________

3. Are you:
Female
Male
4. What is your age?
○ 18-20
○ 21-30
○ 31-40
○ 41-50
○ 51-60
○ 61 or older
5. Where is your place of work?
○ Australian Capital Territory
○ New South Wales
○ New Zealand
○ Northern Territory
○ Queensland
○ South Australia
○ Tasmania
○ Victoria
○ Western Australia
○ Other (please specify)

6. Which of the following best describes the area of Emergency Management work you are MOST involved in (please select only one)?
○ Emergency Management (Senior management)
○ Emergency Management (Middle management/Supervisor)
○ Technical specialist
○ Firefighter/Emergency Service worker
○ Community service
○ Support staff (e.g. comms, admin, etc.)
○ Policy/research
○ Other (please specify)

7. What type of organisation do you work for? (please select only one)
○ Land management
○ Metropolitan fire and rescue
○ Health services (Including paramedics)
○ Community services
○ Public Service Department
8. What is the highest level general education qualification you have been awarded?
- Below Year 12 High School
- Year 12 High School
- Certificate I
- Certificate II
- Certificate III
- Certificate IV
- Diploma
- Advanced Diploma
- Bachelor degree
- Graduate Certificate
- Graduate Diploma
- Masters Degree
- PhD
- Other (please specify)

9. What is the highest level of Emergency Management/Public Safety-related qualification you have achieved?
- In-house, non-award qualification
- Certificate I
- Certificate II
- Certificate III
- Certificate IV
- Diploma
- Advanced Diploma
- Bachelor Degree
- Graduate Certificate
- Graduate Diploma
- Masters Degree
PhD
Other (please specify)

10. How important is it to you to attain a more advanced level qualification in Emergency Management/Public Safety?
- Extremely important
- Very important
- Quite important
- Not very important
- Not at all important

11. How would you describe your level of Emergency Management experience:
- Beginner
- Some experience
- Quite experienced
- Very experienced

12. What is your official title? (Please respond in the generic sense of your emergency management job title; This question is not asking you to disclose your actual jurisdiction or organisation - rather, it asks 'What do you do?")

13. Type of primary emergency management employment/commitment:
- Full-time (permanent)
- Full time (temporary/term/contract)
- Part-time
- Seasonal
- Volunteer
- Student/intern/graduate
- Other (please specify)

14. Type of jurisdiction:
- Federal
- State/Territory
- Municipal/City/Town/Shire
- Private sector
- Non-Government Organisation
- Academia
- Community organisation
- Other (please specify)

15. What is your approximate gross annual salary?
16. How many years have you held your current (primary) position in emergency management?

17. Is your current position dedicated only to emergency management or is it a shared responsibility with another function?
   - Dedicated to emergency management only
   - Shared responsibility with another function(s) within the organisation

If you have a shared responsibility, please describe the non-emergency management function and what % of your time it occupies:

18. How many years have you worked or been engaged in emergency management? (This question is general in nature and is meant to be inclusive of all emergency management related employment or activities).

19. Was emergency management your first field of work?
   - Yes
   - No

20. If emergency management was not your first field of work, please specify your first field of work.

21. Aside from your primary employment in emergency management, are you engaged in emergency management through any of the following? (This is intended to reflect participation that is not required by or directly related to your primary emergency management employment.) Please tick all that apply:
   - Member of a professional association
   - Member of a technical committee and/or working group
   - Member of a policy committee and/or working group
   - Professional writing/editing (professional or technical newsletters, standards, SOPs or trade journals)
   - Peer-reviewed writing/editing (published articles or books)
   - Member of a conference board or conference organizing committee
   - Research
22. Do you hold any specific emergency management certifications (i.e. accreditations by an EM organisation such as IAEM, AFAC)? Please check all that apply:

- No
- Yes, IAEM Associate Emergency Manager (AEMSM)
- Yes, IAEM Certified Emergency Manager (CEM®)
- Yes, AFAC AIIMS national certification
- Yes, other (please specify)

23. What emergency management training have you completed? (This question is general in nature since it is readily acknowledged that the options, titles, levels and sources of emergency management training available are diverse and immense, and that level of detail is beyond the scope of this survey.)

Please select all training areas that apply. (This is training that you have completed.)

- Basic Emergency Management
- Introduction to Emergency Management
- Incident Command System
- Emergency Site Management
- Emergency Operations/Coordination Centre
- Incident Controller
- Hazardous Materials / Chemical, Biological, Radiological, Nuclear and Explosives
- Psychosocial First Aid / Critical Incident Stress Management
- Public Information / Crisis Communications
- Community engagement/communication
- Exercise Programming / Exercise Design
- Search and Rescue
- Business Continuity Management
- Emergency Community/Social Services
- Disaster Health Management
- Disaster Recovery
- Resilience
- Emergency Consequence Management
- Hazard, Risk, Vulnerability Analysis
- Australia/New Zealand Standards Association training/courses
- Australia/New Zealand Armed Forces training/courses
- Red Cross training/courses
- United Nations training/courses
- International Humanitarian training/courses
24. How would you rate your level of formal general education (eg. diploma, degree)?
- Highly educated
- Moderately educated
- Average
- Limited education
- No education

25. How would you rate your level of formal education (eg. diploma, degree) specific to emergency management/public safety?
- Highly educated
- Moderately educated
- Average
- Limited education
- No education

26. How would you rate your level of emergency management training (eg In-house training)?
- Highly trained
- Moderately trained
- Average
- Limited training
- No training

27. How would you rate your personal level of practical emergency management experience?
- Highly experienced
- Moderately experienced
- Average
- Limited experience
- No applied experience

The following questions are worded in the first person seeking your response.

28. With respect to my current position, my formal general education (eg. diploma, degree):
- Has played no role
- Has very little significance
- Might be considered an asset
- Is an important asset
29. With respect to my current position, my level of formal education (degree, diploma) specific to emergency management/public safety:
- Has played no role
- Has very little significance
- Might be considered an asset
- Is an important asset
- Is my most important asset
- Not applicable

30. With respect to my current position, my emergency management training (e.g. in-house, non-award qualification):
- Has played no role
- Has very little significance
- Might be considered an asset
- Is an important asset
- Is my most important asset
- Not applicable

31. With respect to my current position, my practical experience:
- Has played no role
- Has very little significance
- Might be considered an asset
- Is an important asset
- Is my most important asset
- Not applicable

32. If I were seeking a promotion or a new job in emergency management, I think my formal general education:
- Would play no role in the selection process
- Might hinder my chances in the selection process
- Would neither hinder nor help my chances in the selection process
- Might help my chances in the selection process
- Would significantly help me in the selection process

33. If I were seeking a promotion or a new job in emergency management, I think my formal emergency management education:
- Would play no role in the selection process
- Might hinder my chances in the selection process
- Would neither hinder nor help my chances in the selection process
- Might help my chances in the selection process
- Would significantly help my chances in the selection process
34. If I were seeking a promotion or a new job in emergency management, I think my emergency management training (e.g. In-house, non-award qualification):

☐ Would play no role in the selection process
☐ Might hinder my chances in the selection process
☐ Would neither hinder nor help my chances in the selection process
☐ Might help my chances in the selection process
☐ Would significantly help my chances in the selection process

35. If I were seeking a promotion or a new job in emergency management, I think my practical experience:

☐ Would play no role in the selection process
☐ Might hinder my chances in the selection process
☐ Would neither hinder nor help my chances in the selection process
☐ Might help my chances in the selection process
☐ Would significantly help my chances in the selection process

36. Regarding emergency management training, I would recommend that an individual seeking employment in emergency management should focus on the following five areas: (Please select the **five areas** of emergency management training that you deem most important or valuable to working within the field. Note: there is no ranking within your five selections; for the purposes of this question, each of your five selections carries equal weight)

☐ Basic Emergency Management
☐ Introduction to Emergency Management
☐ Incident Command/Control System
☐ Emergency Site Management
☐ Emergency Operations/Coordination Centre
☐ Incident Controller
☐ Hazardous Materials / Chemical, Biological, Radiological, Nuclear and Explosives
☐ Psychosocial First Aid / Critical Incident Stress Management
☐ Public Information / Crisis communications
☐ Community engagement/communication
☐ Exercise Programming / Design
☐ Search and Rescue
☐ Business Continuity Management
☐ Emergency Community / Social Services
☐ Disaster Health Management
☐ Hazard, Risk and Vulnerability Analysis
☐ Disaster Recovery
☐ Emergency Consequence Management
☐ Resilience
37. Regarding certification (i.e. accreditations by an EM organisation such as IAEM, AFAC), I would recommend that an individual seeking employment in emergency management:

- Not concern themselves with it
- Should have at least one related certification
- Should have multiple related certifications
- Should be working towards certification

38. If I had to rank education, training and experience in order of importance for successful employment in the emergency management field, I would rank them as follows (with 1 being most important, 4 being least important):

- General Education
- Emergency Management Education
- Emergency Management Training
- Emergency Management Experience

At present, emergency management is often viewed and referred to as an 'evolving profession' or an 'emerging profession'; however, the literature on this subject is fairly clear in its assessment that, based on generally accepted measurements of professions, emergency management has not yet attained the status of profession. This is an important but complex discussion. The detailed theory of what defines a profession and the concept of emergency management advancing or maturing towards status as a profession, which we will refer to as 'professionalising' or 'professionalisation', are beyond the scope of this survey to address or to present for discussion in this forum. That said, your views on some of the underlying assumptions and/or ideas that generally form the basis for this discussion are informative. Immediately below, a generalized characterisation of professions is provided so that similar context is established among all participants as you consider the final series of questions that follow.

The Oxford Dictionary defines a profession as:
"An occupation whose core element is work, based on the mastery of a complex body of knowledge and skills. It is a vocation in which knowledge of some department of science or learning, or the practice of an art founded on it, is used in the service of others. Its members profess a commitment to competence, integrity, morality, altruism, and the promotion of the public good within their domain. These commitments form the basis of a social contract between a profession and society, which in return grants the profession autonomy in practice and the privilege of self-regulation. Professions and their members are accountable to those served and to society". (Oxford English Dictionary. 3rd ed. Oxford: Clarendon Press; 2007)

39. How important are the following attributes of a profession as defined, to any prospective Emergency Management profession?

<table>
<thead>
<tr>
<th></th>
<th>Essential</th>
<th>Very important</th>
<th>Important</th>
<th>Slightly important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery of a complex body of knowledge and skills</td>
<td>Mastery of a complex body of knowledge and skills</td>
<td>Mastery of a complex body of knowledge and skills</td>
<td>Mastery of a complex body of knowledge and skills</td>
<td>Mastery of a complex body of knowledge and skills</td>
<td></td>
</tr>
<tr>
<td>A commitment to competence</td>
<td>A commitment to competence</td>
<td>A commitment to competence</td>
<td>A commitment to competence</td>
<td>A commitment to competence</td>
<td></td>
</tr>
<tr>
<td>A commitment to integrity</td>
<td>A commitment to integrity</td>
<td>A commitment to integrity</td>
<td>A commitment to integrity</td>
<td>A commitment to integrity</td>
<td></td>
</tr>
<tr>
<td>A commitment to morality</td>
<td>A commitment to morality</td>
<td>A commitment to morality</td>
<td>A commitment to morality</td>
<td>A commitment to morality</td>
<td></td>
</tr>
<tr>
<td>A commitment to altruism</td>
<td>A commitment to altruism</td>
<td>A commitment to altruism</td>
<td>A commitment to altruism</td>
<td>A commitment to altruism</td>
<td></td>
</tr>
<tr>
<td>Attribute</td>
<td>Essential</td>
<td>Very important</td>
<td>Important</td>
<td>Slightly important</td>
<td>Not important</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-----------</td>
<td>--------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Promotion of the public good</td>
<td>√ (Promotion of the public good)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy of practice</td>
<td>√ (Autonomy of practice)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adherence to a social contract</td>
<td>√ (Adherence to a social contract)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self regulation</td>
<td>√ (Self regulation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service to others</td>
<td>√ (Service to others)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability to those served and to society</td>
<td>√ (Accountability to those served and to society)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please add any other attributes that you think are important: (please specify)
40. A review of the literature reflects some other characteristics which might be important to identify a profession. How important are the following attributes of a profession to any prospective Emergency Management profession?

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Essential</th>
<th>Very important</th>
<th>Important</th>
<th>Slightly important</th>
<th>Not important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary education/training</td>
<td>Tertiary education/training Essential</td>
<td>Tertiary education/training Very important</td>
<td>Tertiary education/training Important</td>
<td>Tertiary education/training Slightly important</td>
<td>Tertiary education/training Not important</td>
</tr>
<tr>
<td>Continuous professional development program</td>
<td>Continuous professional development program Essential</td>
<td>Continuous professional development program Very important</td>
<td>Continuous professional development program Important</td>
<td>Continuous professional development program Slightly important</td>
<td>Continuous professional development program Not important</td>
</tr>
<tr>
<td>Core of knowledge</td>
<td>Core of knowledge Essential</td>
<td>Core of knowledge Very important</td>
<td>Core of knowledge Important</td>
<td>Core of knowledge Slightly important</td>
<td>Core of knowledge Not important</td>
</tr>
<tr>
<td>A professional association</td>
<td>A professional association Essential</td>
<td>A professional association Very important</td>
<td>A professional association Important</td>
<td>A professional association Slightly important</td>
<td>A professional association Not important</td>
</tr>
<tr>
<td>Controlled membership</td>
<td>Controlled membership Essential</td>
<td>Controlled membership Very important</td>
<td>Controlled membership Important</td>
<td>Controlled membership Slightly important</td>
<td>Controlled membership Not important</td>
</tr>
<tr>
<td>Attribute</td>
<td>Essential</td>
<td>Very important</td>
<td>Important</td>
<td>Slightly important</td>
<td>Not important</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------------</td>
<td>-----------</td>
<td>--------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Defined standards of practice</td>
<td>Defined standards of practice Essential</td>
<td>Defined standards of practice Very important</td>
<td>Defined standards of practice Important</td>
<td>Defined standards of practice Slightly important</td>
<td>Defined standards of practice Not important</td>
</tr>
<tr>
<td>Accountable to government</td>
<td>Accountable to government Essential</td>
<td>Accountable to government Very important</td>
<td>Accountable to government Important</td>
<td>Accountable to government Slightly important</td>
<td>Accountable to government Not important</td>
</tr>
<tr>
<td>Accountable to fellow members</td>
<td>Accountable to fellow members Essential</td>
<td>Accountable to fellow members Very important</td>
<td>Accountable to fellow members Important</td>
<td>Accountable to fellow members Slightly important</td>
<td>Accountable to fellow members Not important</td>
</tr>
<tr>
<td>Accountable to the community</td>
<td>Accountable to the community Essential</td>
<td>Accountable to the community Very important</td>
<td>Accountable to the community Important</td>
<td>Accountable to the community Slightly important</td>
<td>Accountable to the community Not important</td>
</tr>
<tr>
<td>Provide a supportive environment in which to practice emergency management</td>
<td>Provide a supportive environment in which to practice emergency management Essential</td>
<td>Provide a supportive environment in which to practice emergency management Very important</td>
<td>Provide a supportive environment in which to practice emergency management Important</td>
<td>Provide a supportive environment in which to practice emergency management Slightly important</td>
<td>Provide a supportive environment in which to practice emergency management Not important</td>
</tr>
</tbody>
</table>

What other attributes of a profession are important for any prospective emergency management profession?
41. Do you have any other comments you would like to make concerning the professionalisation of emergency management in Australia?

Congratulations, you have successfully completed the survey.

Thank you for taking the time from your busy schedule. Your input will be used to analyse "Who are Australia's Emergency Managers", and will provide some input to deliberations about 'where to?' for an EM profession.
ATTACHMENT 4

INTERVIEW DOCUMENTATION AND QUESTIONS

Explanatory statement for “EM Professionalism” interviews

The Monash University Disaster Resilience Initiative (MUDRI) is sponsoring an original Australia-wide research project aimed at learning more about the people who comprise the field of emergency management in Australia.

The project is a demographic survey of Australian emergency management personnel, and the results will contribute to a benchmark profile of this emerging profession in Australia. There is little research on who we are as Australian emergency management personnel, and the results from this project will provide us with further insight on the current state of professionalization of our field within Australia. As an Australian engaged in emergency management, you are invited to participate in this survey.

The researcher’s name is Dudley McArdle, and this project is part of the requirement for a Master’s Degree in Philosophy (Community Resilience and Emergency Management) at Monash University. Dudley’s credentials with MUDRI can be established by emailing Emeritus Professor Frank Archer, Program Head, at frank.archer@monash.edu.au.

You may have participated in a demographic survey conducted for the project earlier in the year. This stage of the project consists of a number of semi-structured interviews with practising emergency managers to expand on and clarify information gained from the survey. There are a number of questions and the interview should take less than an hour to complete. The questions will ask you about your opinions on basic matters pertaining to the professionalisation of emergency management. There will be no personally identifiable information collected or presented.

The information you provide will be summarized, in anonymous format, in the body of the final report. At no time will any specific result be attributed to an individual. All data will be kept strictly confidential and will be handled and available only to the researcher. Although Monash University is sponsoring this project, at no time will Monash University have access to the survey data. The data will be stored electronically, password protected and will only be accessible to the researcher. It will be retained electronically for a period of one year following submission of the final project report.

The final report will be published at MUDRI. A copy of the final report will be made available to you. You are invited to monitor the MUDRI website where the findings will be made publicly accessible once the research project has been successfully completed. Ideally this will occur in late 2017.

There are no foreseeable conflict of interest issues relating to this study. If you have any questions, please feel free to contact the researcher at dfmca1@student.monash.edu. You are not compelled to participate in this research project. If you do choose to participate, you are free to withdraw at any time without prejudice and any responses provided to that point will be deleted.
Your acceptance of the offer to participate in the interview will constitute your informed consent. Thank you in advance for your time and willingness to participate.

**Interview Consent Form**

**CONSENT FORM**

In what ways do the profile, background, experience, skills and qualifications of Australia’s emergency managers reflect the elements of a discrete emergency management profession?

Chief Investigator: Emeritus Professor Frank Archer  
Student: Dudley McArdle  
Department: Monash University Disaster Resilience Initiative  
Phone: + 61 3 9905 1388  
Email: francis.archer@monash.edu

I have been asked to take part in the Monash University research project specified above. I have read and understood the Explanatory Statement and I hereby consent to participate in this project.

<table>
<thead>
<tr>
<th>I consent to the following:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking part in a semi-structured interview</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio recording during the interview</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The data that I provide during this research may be used by Emeritus Professor Frank Archer, Dr Caroline Spencer, Professor ‘Skip’ Burkle and Dudley McArdle in future research projects.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of participant: ____________________________________________

Participant signature: __________________________________________

Date: __________________________________________
Interview Questions

1. Did you do the survey? What were your impressions?
2. What would you see as the defining characteristics of a profession?
3. Do they apply to the EM sector?
4. Do you see advantages in EM being seen as a profession? Disadvantages? What difference would it make for you?
5. What would need to be done to make EM a profession?
6. Accreditation? AFAC?
7. Is there a need for a professional association for emergency managers? How would it help you?
8. There are a relatively small number of survey participants for whom EM is a first career. Is that your experience? Do we want more direct entrants? How could we achieve that?
9. Is gender an issue in EM?
10. Is there a need for tertiary EM programs? Would you do them? Suggestions? Would you allow/encourage/sponsor your staff to do them?
11. What changes would you like to see, at a professional level, in EM?
12. Any other points about professionalisation?