PROJECT MANAGERS' JOURNEY TO GAIN PROFESSIONAL IDENTITY

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THESIS SUBMISSION

Supervisor Approval Declaration

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To the best of my knowledge, the thesis contains all the candidate's own words completed under my supervision, and is worthy of examination.

I approve the submission of the thesis that is being submitted for examination.

Signed [redacted]

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Declaration of Author

I hereby declare that this paper submitted in partial fulfilment of the PhD degree is my own work and that all contributions from other persons or sources are properly and duly cited. I further declare that this does not constitute any previous work whether published or otherwise. In making this declaration I understand and acknowledge any breaches of the declaration constitute academic misconduct, which may result in my expulsion from the program and/or exclusion from the award of the degree.

Rozinah Bachik



Date: 27th JUNE 2015

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Abbreviations

AMA	American Medical Association
APM	Association for Project Management
CIO	Chief Information Officer
CITPM	Certification in Information Technology Project Management
GATS	General Agreement on Trade and Services
IHREC	International Graduate School of Business Human Research Ethics Committee
IPMA	International Project Management Association
IT	Information technology
KPMG	Klynveld Peat Marwick Goerdeler (accounting firm)
MBA	Masters in Business Administration
MNC	Multi-national corporation
MPE	Mechanical Production Engineer
MU	Meaning units
NAFTA	North American Free Trade Act
NHS	National Health Service
PfMP	Portfolio Management Professional
PM	Project managers
PMBoK	Project Management Body of Knowledge
PMI	Project Management Institute
PMP	Project management professional (certification)
PRINCE2	Projects in controlled environments
SMA	Singapore Medical Association

Abstract

In the age of knowledge-based economy, there has been a rise in skilled labour such as project management (Muzio, Hodgson, Faulconbridge, Beaverstock, & Hall, 2011). Like many similar occupations, project managers strive to gain professional status to establish professional control (Freidson, 2001) and occupational closure, where the group is able to carve its own boundary to secure legitimacy in monopolising the practice (Abbott, 1988, Evetts, 2006). However, few occupations have successfully gained professional status, with occupations such as journalism, nursing and librarianship currently being examples of exclusion in the United States (Leggatt, 1970, Olesen and Whittaker, 1970). Their lack of success has often been explained as due to the lack of agreement on the criteria that define a profession (Freidson, 2001, Kimball, 1992, Spada, 2009).

Numerous publications have been written about occupations striving to achieve professional status and justifying their claim, and yet there have also been counter arguments that deny professional status for occupations such as nursing because they have failed to meet all the requirements laid out by the criteria set by some professionalisation models (Liaschenko and Peter, 2004, Oweis, 2005, Wade, 1999). It might even seem puzzling why some occupations still continue on this path to prove their professional status. The impetus to achieve professional status would seem to vary between an altruistic aim in creating a meritocracy of recognising knowledge-based skills rather than social status, and championing ethical practice through setting professional standard and governance.

This research investigates the experiences of 48 project managers in Singapore who are contemplating undergoing a professionalisation process. It examines literature that addresses identity theories, occupation theory, and professionalisation theory, and the three professionalisation models: attribute models, process models, and power and market models. The methodology used in this study is qualitative, using an interpretive phenomenological approach to gather and analyse information from 48 participants located in various industries.

The research data show that the transition from occupation to profession requires multifaceted changes from society's acceptance, the occupational group's effort, and individual members' commitment. While some of the elements, such as unifying the body of knowledge, can be influenced by the practitioners, there are others, such as regulating the practice at national level, that are largely difficult to control but which could give the occupation the edge to gain professional status.

Specifically for project management in Singapore, the findings indicate that (a) there are elements within the practice of project management that require further enhancement to strengthen the foothold on professional status, such as a unified body of knowledge and established tertiary education for project management; (b) increased commitment by members of project management community to strategise and sustain the momentum to get to professional status; and (c) support from the Singapore legislative system to insist on regulation of this occupation. These findings suggest professional status will continue to be elusive for this occupational group unless these events unfold.

1 INTRODUCTION

1.1 Understanding the demand for professional status

The era of the knowledge-based economy has seen unprecedented development and proliferation of new forms of skilled labour, especially in areas such as information communication and technology (Marks and Scholarios, 2007, Neffati, 2012), project management and management consultancy (Kirkpatrick, Muzio, & Ackroyd, 2012). This modern knowledge-based economy requires significant specialised knowledge and skills for dealing with such levels of workplace complexity; thus, it can potentially affect a wide range of occupations (Schilirò, 2012). Coincidentally, and to some extent consequently, a number of these occupations experience increasing pressure to gain professional recognition (Wilensky, 1964) and many of them seek equal footing with practices such as medicine and law.

Project management is one of the occupations that is considered knowledge-based. It is the practice of following a set of processes that include utilising resources, tools and techniques (Isik, Arditi, Dikmen, & Birgonul, 2009) to juggle the competing demands of keeping a project within budget, time, resources, and scope, while maintaining the quality of the outcome. In order to practice project management, project managers need to equip themselves with the right competencies to carry out the work. Typically, incumbents of the project management practice have tertiary education. They also practice in various industries. According to the recent 2015 survey in Singapore on project management salary by the Project Management Institute (PMI, 2015a), the majority (31%) of project managers in Singapore are in the Information Technology industry, followed by the financial (14%), manufacturing (9%) and engineering (8%) industries.

Project managers have taken steps to emulate features of traditional professions like medicine, such as developing a body of knowledge and implementing certification processes. However, studies have also shown that project management has yet to secure a strong foothold on professional status (Thomas and Zwerman, 2011, Zwerman, Thomas, Haydt, Bruyere, & Williams, 2004b). Nonetheless, in view of its significant contribution to the national economy (PMI, 2010) and its recent history of repeated attempts to professionalise, project management would seem a suitable occupation to investigate the trend towards professionalisation. In their investigation, Zwerman et al. (2004b) concluded that it seemed

unlikely that any such transformation might succeed without the work of dedicated individuals within the ranks of practitioners. It would seem desirable, then, to understand more about how practitioners feel about the chance that attempts to professionalise their occupation will be successful, what they feel might be demanded of them in the process, and whether or not they would support this type of endeavour. This thesis aims to uncover the experiences of a group of project management practitioners in Singapore focussing on their shared understanding of what is required from them in their transition from an occupation to a professional state, their confidence in achieving a successful outcome, and how committed they are to the journey.

Chapter 1 provides the background to the investigation of the experiences faced by existing project managers in the evolution of their occupation into a professional state in Singapore. This chapter examines the specific problem statement that leads to the research questions, the significance of this study, and the methodology employed to gather and analyse the data from the research participants.

1.2 Rationale for this study

In general, a profession is described as a specialised occupation that involves specialised knowledge and skills (Ferguson and Ramsay, 2010). However, the exact criteria to designate professional status have not been used consistently by different authors. The selective use of the criteria would appear to be dependent on whether or not the criteria suit the authors' intent (Abbott, 1988). For example, there are occupations that obviously require specialised knowledge and skills (e.g. plumber), but which might not be accorded professional status because many would not want to place it in the same category as medicine and law. Further, Saks (2012) described professions as being sheltered by restrictions to entry through relevant higher professional credentials. In consequence, many see professional status as an elitist label because it defines who should be included in the group and who should not. However, many people are becoming more sceptical of professional expertise; the public demands greater transparency from all professionals (Collier, 2012) and there is increasing disapproval of professions, partly arising from direct opposition to monopolisation, bureaucratisation, hegemony, and elitism in democratic societies (Cleary, 2012, Picciotto, 2011). For example, the large number of high-profile cases of malpractice by corporate lawyers (Flood, 2010) evince a lack of transparency in that professional practice, which attracts public concern.

Yet, despite these increasing challenges from the general public and questioned claims to professional status, many occupations still strive to be called professional (Beijaard, Meijer, & Verloop, 2004, Liaschenko and Peter, 2004, Oweis, 2005, Wade, 1999). This issue will be addressed more fully in Chapter 2. The two main motivations to seek such a status would appear to be the need to establish professional control (Freidson, 2001) and occupational closure (Abbott, 1988). This would allow professional groups to self-govern and remove themselves from external scrutiny, because they would have the best understanding of the workings of their profession (Noordegraaf, 2007). Self-governance is desirable as it will enable the profession to put in place and monitor standards that it feels are necessary without needing to consult the public (Lester, 2016). In addition, the establishment of standards and objective criteria based on knowledge and skills conveys an ethical and more altruistic approach in selecting and allowing into the profession members who are worthy (Spada, 2009). It helps curb unethical and questionable practice by non-professionals who do not follow any given standards, which could lead to undesirable outcomes, as seen in the medical profession prior to its professionalisation (Waddington, 1990).

However, beyond this social aspect of understanding the criteria for an occupation to be called a profession, there are other internal changes that members of these professions have to go through (Maister, 1997). The most essential is that existing members need to first share the group's common aspiration to achieve professional status and to understand what is required of them individually to contribute to the group's objective. Individuals will help shape the group's professional identity, defining it by their own actions and adapting to the group's agreed definition (Limberg, Bell, Super, Jacobson, Fox, et al., 2013), and this requires commitment from the individuals (Allen, 2011, Morris, 2013b).

The underlying challenge, however, is in understanding and sharing the requirements to realise professional status. There are three main models used to assess whether a certain occupation has achieved, or could achieve, professional status: attribute models, process models, and power and market models. Each of these models has been used to explain why certain occupations could or could not attain professional status—depending on where the authors want to position the occupation's professional status. The subtle and obvious disparities between each model, and their merits, have been discussed by many authors (Curnow and McGonigle, 2006, Emener and Cottone, 1989, Thomas and Thomas, 2014). These are discussed next.

1.2.1 Models of professionalisation

Attribute models describe the traits of professions as opposed to occupations; for example, the profession determines its own standard of education and training, its members clearly identify and affiliate themselves with the profession more than members of occupations, and if given a choice to do it over again, members remain in the profession and would choose this type of work.

Process models describe the process of gaining professional status; for example, the occupation becomes full-time work, a professional association emerges, and a formal code of ethics is developed or adopted.

Power and market models describe the rationalisation and bureaucracy needed to create the profession. They indicate, for example, the development of specialised knowledge, a standardised body of knowledge, and restrictions to the supply of services.

There are subtle disparities between the models. Attribute models, for instance, indicate that a profession determines its own standard of education and training (Goode, 1960), whereas process models reflect that formalised training, which often occurs in higher education settings (Wilensky, 1964). There is an obvious disparity, however, in that power and market models reject both the attribute models and process models by focusing on rationalisation and bureaucracy in describing how a profession is created (Tobias, 2003). To add to the confusion, these differences have been used to justify an occupation's professional status. For example, the attribute model is used to define the medical profession (Abbott, 1988), but medical professional status is weakened (Reich, 2012) when patients acquire medical knowledge through the Internet (Lewiecki, Rudolph, Kiebzak, Chavez & Thorpe 2006), allowing them to question the doctor's diagnosis and care plan. This negates the attribute model, which describes the practitioner as being relatively free of lay evaluation and control. From this perspective the attribute model can no longer be used to justify the professional status of medicine; however, medicine still qualifies as a profession in power and market models because it has the rights and privileges given by the society to practice (Ritzer, 1977).

There is a need to understand the disparities between these models because they could explain why certain occupations can be called professions using one model but not the others. This is explored more fully in the literature review in Chapter 2. The outcome of these comparisons might help identify the crucial missing elements that an occupation needs to gain the professional status. In addition, there is also a need to explore the individual

struggles to achieve the criteria set within each model. Such endeavours might highlight the limitations and gaps within each of these models.

Project management is one of the new occupations that strive for professionalisation (Hodgson, 2005). Zwerman, Thomas and Haydt (2004a) characterised project management as a knowledge-based occupation like medicine and law, which is predisposed to follow the course of these traditional professions towards gaining professional status. However, like journalism and librarianship, project management does not have a strong foothold on the professional status (Hällgren, Lindahl, Nilsson, Blomquist & Söderholm, 2012, Turner, 1999, Zwerman, Thomas, & Haydt, 2004a) because it does not fulfil some of the criteria indicated in the three models.

Project management has evolved over the past 40 years (Muzio, Hodgson, Faulconbridge, Beaverstock & Hall, 2011), shedding its image from being a purely technical function to also encompassing organisational skills that can influence resources and strategic decision-making (Isik et al., 2009). While project management's strength continues to lie in its methodology in running projects (Isik et al., 2009), its evolution has also introduced complexity. Project management style has become more dynamic in nature to support the rapid changes in technology and business processes that cause unpredictable fluctuations in cost (Brandas, Digraga & Bibu, 2012, Schwalbe, 2010). In addition, the practice is not homogeneous across different types of projects (Besner and Hobbs, 2008, Payne and Turner, 1999), making it difficult to standardise processes, which may have contributed to its failure to achieve the criteria to gain professional status. However, project management continues to refine the methodology they use based on best practice and feedback from practitioners.

Many organisations turn to project management as part of their competitive advantage strategy (KPMG, 2013, Maylor, Turner & Murray-Webster, 2013, PwC, 2012) to drive business profits, to increase business efficiencies, and to achieve strategic business goals (PMI, 2012). Between 2004 and 2007 the adoption of project management increased by seven per cent, and the figure has continued to remain stable (PwC, 2012). According to a PMI white paper on building high-performance project talent, in 2012 nearly eighty-three per cent of global organisations reported difficulty in hiring qualified project management candidates to fill open project management positions. It claimed that not having the right talent to tap could diminish an organisation's competitive edge. Furthermore, it noted that developing project talent does not happen overnight; it takes years of careful and thoughtful planning to build a formidable project management talent pipeline.

According to accounting firm Klynveld Peat Marwick Goerdeler (KPMG), skilled project management was deemed the single biggest factor influencing the outcome of projects in New Zealand (KPMG, 2013), with four out of five organisations (PMI, 2013a) reporting a global struggle to find qualified project managers to fill open positions (see Figure 1.1). Likewise, in the United States a high demand for project practitioners is reflected by project management professional (PMP) credential holders earning an average sixteen per cent more (about USD 14,500) than their non-credentialed equals in 2011 (PMI, 2013c). In Singapore, it is no less impressive. A study by Kelly (2012) of continuous hiring for project-related roles with annual salaries ranging from SGD 80,000 to SGD 200,000 showed a rise in the number of projects (Walters, 2016).

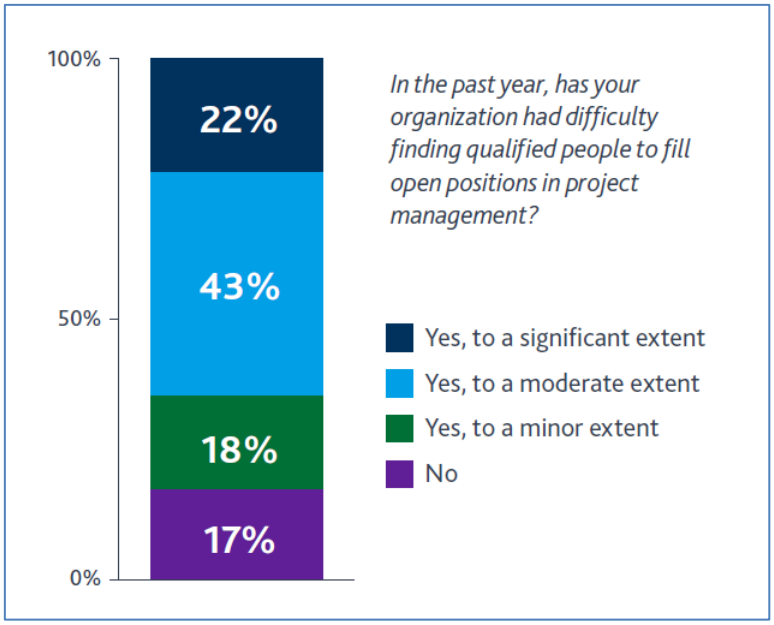


Figure 1.1: Difficulty in hiring qualified project managers (PMI, 2013a)

Furthermore, it is estimated that an additional 1.57 million project management roles will be created globally every year until 2020, according to a study by Anderson Economic Group (cited in PMI, 2013c). With such growing project demands (Light, 2013), demand for global project management talent will only increase in the coming years (Ng, Walker & Levin, 2014). In addition, a study by PricewaterhouseCoopers (PwC, 2012) showed that project success increases when managed by trained project managers, and organisations are also awarding higher salaries to project managers with PMP certification (PMI, 2015a). Project success is defined as meeting the triple constraints (budget, time, and scope) as well as customer satisfaction (Ekrot, Kock, & Gemünden, 2016). As such, the emphasis is to

ensure the practice of project management is consistent with proper training, certification, and a standardised body of knowledge.

This has led many project management practitioners to consider undergoing a formal process of professionalisation, driven globally by professional associations representing the interests of project management and project managers (Paton, Hodgson, & Muzio, 2013), and through the standardisation of bodies of knowledge and a certification process (Morris, Crawford, Hodgson, Shepherd & Thomas, 2006).

The present volatile economic situations, tight labour markets, and the increasing shift towards project-based work creates a need to further explore the specificities and characteristics of project management careers and professional identity, and to build an understanding of the states and stages of a typical ongoing course of project management professionalisation. Knowing that businesses can rely on the professionalism of the project manager's skill level not only helps relieve much of the potential anxiety in such situations; it also provides added impetus to justify their professional recognition.

1.3 Significance of this research

According to studies undertaken in 2013, a growing percentage of the global workforce is employed in project-based careers or project-oriented organisations (Bredin and Söderlund, 2013, Crawford, French, & Lloyd-Walker, 2013). In addition, the increasingly globalised nature of organisations relies on expert staff and consistency in practices, as project managers are engaged in global projects or involved in project practices across national boundaries (Faulconbridge and Muzio, 2012, Paton et al., 2013).

Project management contributes significantly to the overall economic growth. A study by PMI (2013c) projected that between 2010 and 2020 the project management profession's economic output will increase by over USD 5 trillion to USD 12.37 trillion in ten countries; namely, Australia, Brazil, Canada, China, Germany, India, Japan, Saudi Arabia, United Arab Emirates, and the United Kingdom. With such a substantial impact on the economy, it is in the interest of organisations to ensure projects are run using proven methodology to produce successful outcomes. The practice of project management has demonstrated it is able to consistently generate positive results (Isik et al., 2009). The challenge is to ensure project managers adhere to standard practice and that they can be entrusted to perform their work ethically. These characteristics are the very essence of professionalism, as aptly summarised by Spada (2009): "[P]rofessionals are a potential source of ethical role models via

promulgation of professional standards, ethics and morality in business, government, and civil society" (p. iii).

The importance of safeguarding the economic assets of a nation is greater in Singapore, the site for this research, because Singapore is an island country with no natural resources except a strategic location, which is highly dependent on a globally competitive workforce to support the government's vision of its place in the forefront of a globalised, knowledge-driven economy (Gopinathan, 2007). To support and sustain a fast-growing economy, Singapore will need a rich pool of project managers to help manage globally competitive projects and stay ahead of the economy. The added constraints faced by Singapore are (a) low fertility, a shrinking workforce and an ageing population (Jones, 2012); (b) sustaining economic competitiveness by reducing reliance on foreign talent and increasing the proportion of the workforce in professional, managerial, executive, and technical occupations (Sung, 2012); and (c) a global increase in the growth and demand for project managers (PMI, 2013c).

Looking ahead, Singapore will need to respond to demands for project management professionals with relevant project management skills, which are not matched by local availability of resources (PMI, 2013c). The stakes are high. Lack of capability could reduce the chances of successful project completion and diminish Singapore's global competitiveness and economic growth. Although there are no data showing how project management contributes to overall Singapore economic growth, it is likely that the PMI (2013c) study on the project management profession's economic output globally reflects a similar situation in Singapore.

Against this backdrop, it is important to understand the sentiments of the members of this occupation and their struggle to promote acceptance of their occupation as a profession. Hällgren and colleagues (2012) noted that project managers needed to overcome multiple challenges before achieving professional recognition. Nevertheless, in its 2014 annual report (PMI, 2015c) PMI claimed that project management is a profession, even though the fundamental challenges highlighted by Hällgren and colleagues had not been fully addressed. Some of these challenges include unified project management standards and project management qualifications. To add to the perplexity, Richardson, Earnhardt and Marion (2015) pointed out that project management is an accidental profession that the members stumble upon by chance and not by choice.

To understand how the occupation can become accepted as a profession, it is important to understand how project managers fare in Singapore and what challenges they face to bring their occupation to the next level, so that they can confidently claim that they can aid Singapore economic growth by competently managing an increasing number of projects without relying on foreign talent.

1.4 Current research limitations and gaps

Although the findings reported above showed disparities in the perception of project management's professional status, there exist a limited number of studies on the experiences from the project managers themselves. Much has been written about the importance of project management to industry (Chipulu, Neoh, Ojiako, & Williams, 2013, Lloyd-Walker, Crawford, & French, 2013) and how to improve the efficiency and effectiveness of project management practice (Jacobsson and Söderholm, 2011). Significantly less is known about the challenges that characterise project managers specifically (Hodgson, 2002, Pinto and Kharbanda, 1995), the role and motivation of the individual project manager (Hölzle, 2010), and the careers and career models of project managers (Bredin and Söderlund, 2013). Despite project management's deep impact on an organisation's success (Obeidat and Nasereddin, 2013, PwC, 2012) and a growing demand for skilled and qualified project managers (Light, 2013, PMI, 2013a), project success is highly dependent on the project manager's ability (Kendra and Taplin, 2004, Wang and Li, 2009). Only a handful of research publications have examined project manager competencies (Alam, Gale, Brown, & Khan, 2010, Alam, Gale, Brown, & Kidd, 2008, Keil, Lee, & Deng, 2013, Wang and Li, 2009). Also, relatively little research attention has been given to the knowledge requirements of global project managers (Hahn, Bredillett, Kim, & Taloc, 2012); to the skill sets required for project managers leading project teams with members often from diverse disciplines (Collins and Schragle-Law, 2010); and to industry specificity (Chipulu et al., 2013), such as project manager competencies specific to a particular industry sector. In addition, the findings that do exist have usually been based on project managers outside the Singapore context.

This research will attempt to address the research gap in the literature by examining the project managers' shared understanding of what they need to do to advance their occupation into a profession, their confidence in attaining a successful outcome, and whether or not they are committed to this journey. The data generated could identify the gap in the individual members' understanding of the requirements and determine whether or not they

share the same aspirations. The approach this research takes is to investigate the lived experience of project managers and their struggle to achieve professional identity based on practitioners' real-life narrative accounts and responses to their exposure to project management practice. This research identifies the issues and tensions that influence the construct of a project manager's professional identity. The findings contribute unique insights into the professionalisation of project management and a better understanding of the careers and challenges involved in project work. Suggestions are made as to how to improve current practice and enhance the chances of success. This research achieved these outcomes through the research methodology outlined in the next section.

1.5 Research question

This thesis uses a holistic approach to gather information about project management, an occupation that is in the process of transitioning from the occupation status to a professional status, and this shall be referred to as the journey. The aim of this research is to uncover whether or not project managers have a shared understanding of what is required from them in their progress towards professionalisation, their confidence in achieving a successful outcome, and how committed they are to the journey. In consequence, the outcome may:

1. identify what behaviours project managers believe contribute to the successful outcome of the professionalisation process; and, specifically, the extent to which they believe other behaviours are denying them from attaining professional status
2. evaluate the effectiveness of the different models used in professionalisation theory (i.e. attribute models, process models, and power and market models), explain their individual limitations, and clarify the differences of opinions about occupation's professional status
3. evaluate the occupation's readiness to be assigned professional status
4. identify for practitioners in other occupations certain key elements that they can control and which could propel their occupations further towards their goal of achieving professional status.

Other elements may be identified that are largely difficult to control but which practitioners may be able to influence, giving the occupation the edge in gaining professional status. Therefore, this research might lead to a better understanding of the key factors that influence and shape the developmental course of project managers' self-concepts and professional identities, as part of the process of professionalisation. In addition, whereas most

studies evaluate the effectiveness of an occupation's journey towards professionalisation and lessons learned from occupations that have achieved or have failed to achieve professional status, this study investigates the lived experiences of members of an occupation that is evolving into a profession. These accounts include what they see as the likelihood of their project manager role gaining professional status, and how they view the nature of their progression. The key results from the study help project managers in Singapore reappraise their current approach to gaining professional status and proposes different strategies to achieve it.

1.6 Literature review and methodology

This research is underpinned primarily by a review of journal articles to understand the existing gap in professionalisation theories and the current challenges faced by project managers in gaining professional status. The literature is sourced mainly from reputable academic journals, electronic journals, dissertations, unpublished working papers, government publications, conference proceedings, academic books, and the Internet. Further details of the underpinning rationale for this research are provided in Chapter 2. The literature review critically examines the works of previous researchers on the concepts of identity, occupation, professionalisation, and the implications of existing professions that are facing challenges to their professional status. The information gathered supports the aim of the research. It also generates ideas pertinent to the research questions, which ultimately contribute to the research topic.

Qualitative phenomenology methodology will be used for this research, since it is aligned with the nature of the investigation which gathers both descriptive and detailed data about the experiences of the research participants (Corbin and Strauss, 2008, Smythe and Giddings, 2007). As indicated by Smythe and Giddings (2007), qualitative research helps develop detailed understanding of complicated phenomena by relating to people's experience. This approach is suitable for finding answers to the research questions posed by this study. This methodology is detailed in Chapter 3. Chapter 3 will also demonstrate the focus on the experience of the interviewed project managers and how their understanding of their identity and their motivation to commit to the process may contribute to them achieving a more professional status.

In-depth interviews were conducted with participants who were involved mainly in project management work, either as project managers or as supervisors. The interviews were

based on structured questions derived from the research questions, after which unstructured questions probed the participants' experiences further. This reflective process allowed the participants to provide comprehensive information, revealing both explicit and hidden meanings (Finlay and Eatough, 2012).

1.7 Overview of the thesis structure

This thesis closely follows the structure suggested by Perry (1998) and Dunleavy (2003). It contains five chapters with the following organisation.

Chapter 1 introduces the background to the problem and the need for this research. It includes the purpose, current limitations and research question that will be explored further in the later chapters. It also explains the significance of this study, which is to achieve better understanding of the current theoretical framework and identify possible areas needed to bridge the existing gap.

Chapter 2 presents the literature review, which identifies past research findings on identity theory, occupational theory, and professionalisation theory. It explores acknowledged professions and measures them against the criteria for professionalisation set out in the various theoretical models. The research questions are derived from the gaps identified in the literature review.

Chapter 3 describes the research design and methodology employed in gathering the data for this study. It provides the justification for using an interpretive phenomenological approach in this qualitative study.

Chapter 4 details the data analysis and findings that were captured during the interview process with the research participants. This chapter also analyses and categorises the findings into emerging themes that can be used to expand professionalisation theory.

Chapter 5 discusses the findings and summarises the thesis. It addresses the implications of the research for theory and highlights the research limitations. It also discusses the contribution of this study and offers recommendations for future research.

2 LITERATURE REVIEW

2.1 Introduction

Through the process of exploring the lived experiences of individuals in an occupation that anticipates its evolution into a profession, this research aims to uncover whether or not project managers have a shared understanding of what is required from them in their progress towards professionalisation, their confidence in achieving a successful outcome, and how committed they are to the journey. Participants' personal journeys navigating their way through the myriad of challenges in attaining professional status will partly explain the limitations of the current system in defining and awarding professional status to occupations and what factors they understand could help them achieve it. Currently, it would appear that there is no universal acceptance of some borderline occupations as potential professions. For example, despite often being referred to as professions by occupants and in journals, professional status continues to elude journalism, nursing, and librarianship (Leggatt, 1970, Olesen and Whittaker, 1970). It is a controversy that would appear to have stemmed partly from a lack of ubiquitous agreement on the term 'profession' (Freidson, 2001, Kimball, 1992, Spada, 2009) and the qualifying criteria.

The candidate introduces this review by analysing how project managers in Singapore, knowledge-based workers, construct their professional identity against the backdrop of known models and to what extent this matter of identity may be a prerequisite to undertaking the journey towards acknowledged professional status.

The literature review is divided into seven sections. The first section begins with the understanding of an occupation's motivation to gain professional status. The second section explores the basic concepts of an individual's identity based on categorization of the self as occupying different roles in society; the many identities that an individual may hold; and how these identities are invoked in different situations. Within this discourse, the candidate introduces the construct of professional identity as one component of an individual's multiple identities, the role identity, which relates mainly to his or her profession. The third section provides a sociological perspective of professions, professional identity, and professionalisation. Theories viewed through the lens of professionalisation help build an understanding of the traits or attributes that set a profession apart from a non-profession (an

occupation), the progression of an occupation towards becoming a profession, and the stimulants that contribute to professionalisation.

The fourth section looks critically at the existing literature on various occupations that have previously either obtained professional status or failed to do so. Reviewing the course undertaken by selected earlier professions to achieve professional status will lay the foundation for understanding how others have experienced this trajectory, indicate key points in this trajectory, and identify the criteria by which professions are measured. The fifth section critically analyses the current literature on project management professionalisation undertakings, the current status of professionalisation of project management, and the arguments for and against professionalisation of project management. The sixth section lists the present studies' research gaps. The final section summarises the findings from the literature review, highlights unanswered fundamental questions, and helps to develop meaningful research and interview questions that need to be addressed in order to move forward with the analysis of the project management professionalisation journey.

Content for this literature review has been sourced from various types of written publications such as reputable academic journals, electronic journals, dissertations, unpublished working papers, government publications, conference proceedings, library books, and the Internet. The materials cover the period 1901 to 2016. The wide scope of the coverage, which includes both old and new but relevant references, helps to ensure that a reasonable amount of information is examined.

2.2 Motivation to gain professional status

Ferguson and Ramsay (2010) defined an occupation "as the principle *[sic]* activity one engages in to earn money" (p. 24). Although Ferguson and Ramsey's definition seems very broad, it does not distinguish between various forms of activity in order to earn an income as it encompasses almost every action that takes place in exchange for money; however, it is the only definition commonly utilised by many authors to define an occupation. It provides sufficient scope to include a variety of occupations, although "occupation" is also often interchanged with the terms "work", "job", "career", or "calling" (Walsh and Gordon, 2008) and this research will follow a similar practice, using the term "occupation" to also refer to "work", "job", "career" and "calling".

2.2.1 Understanding the definition of profession

The definition of a profession, however, is quite difficult to ascertain, especially in trying to distinguish between theorists' and laymen's perspectives. There are many occupations where incumbents require some form of tertiary education to achieve professional status. Tertiary education would seem to be a prerequisite for acceptance as an occupation, but it may not be enough. Whereas theorists have tried to pin some form of structure to the definition by means of assigning, for example, common traits that the members of the profession should have, lay persons tend to view a person who holds a profession as having specialised knowledge and expertise (Brown and McCartney, 2001), as "mediators and appliers of the highest knowledge in the various social domains" where there is "no higher authority, no greater profound source of knowledge to which to turn" (Brante, 2013, p. 4), such as priests. The nuances between the two definitions would appear to lie in the philosophy of being a profession as prescribed by theorists.

The way the general public uses the term "professional" has created confusion. Many have challenged the claims to being professional by childcare workers (Becker, 2002), teachers (Beijaard, et al., 2004), project managers (Bargaoanu and Dobrescu, 2006) and engineers (Freidson, 2001, Sjöstrand, 2013). Nonetheless, one understanding common to laymen and theorists alike is that there is a difference between an occupation and a profession (Brante, 2011). Brown and McCartney (2001), for example, differentiated professionals as individuals:

> … in a paid occupation so well organised that he or she can realistically envisage a career over most of his or her working years, a career during which he/she can retain a particular occupational identity and continue to practice the same knowledge-based skills, no matter in what institutions he/she works. (p. 181)

This is similar to the recognition by Ferguson and Ramsay (2010) of a profession as a specialised occupation that requires specialised knowledge and skills. Yurchenko and Mansurov (2014) described the knowledge specific to a profession as science-based (Brante, 2013), where "'science based' signifies practices that are built upon and adhere to scientifically established principles and findings, and that scientific theories are integrated with practices" (p. 3). They added that the scientific aspect is developed through research and systematic education and training (Brante, 2013, Yurchenko and Mansurov, 2014). Fournier (2001) also noted that the work of a professional consists of delivering service through their scientific knowledge for the public good. Having an expansive and expensive education that

involves theoretical knowledge also distinguishes professions from vocations (which are also part of occupations), where the latter refers to "the lower-level occupations and manual work where practical and tacit knowledge is important" (Roosipõld and Loogma, 2014, p. 1).

Brown and McCartney (2001) ventured further in distinguishing between the professional and the amateur who also has a certain level of expertise, by reflecting that an amateur would likely perform the work without being concerned about getting paid for it; for example, a professional photographer would charge exorbitantly for a photo shoot while an amateur would do it for the experience gained. Svensson (2015) also agreed that, unlike professionals, amateurs lack higher education in their field of expertise, hence setting them apart from professionals even though they may share the same title; for example, in the fields of athletics and art. Furthermore, Evetts (2012) added that professions value the importance of trust and confidence in their relations with clients, which is not expected from amateurs. In other words, a profession arises when it meets certain criteria that are defined by many writers over the years in their study of established professions such as medicine and lawyers.

In this research the term "profession" is defined using the academic perspective, as the scope and definition used by laymen vary across different cultures, and lack a strong and consistent theoretical foundation. The academic perspective shows less variability and provides better insight into the rationale used in defining the criteria of the professional status, which is one of the foci of this thesis.

2.2.2 Issues with the academic definition of profession

However, even among those who have written from a scholarly perspective, criteria have not been applied consistently across different occupations (or in different locations) whose members seek to attain professional status. This inconsistency stems from "the lack of consensus on the meanings and approaches to conceptualization" of professionalisation (Roosipõld and Loogma, 2014, p. 2). In consequence, perhaps, many occupations fail to attain this goal. As Abbott (1988) pointed out, the definitions employed by the writers are only as strong as they need to be to support the writer's theoretical perspective. Evetts (2013) added that some authors used the disparities in the precise definitions of profession to dismiss the differences between occupations and in consequence avoided the debate on the underlying conceptual discrepancies. He also noted that "many groups that obviously are professions do not look like American medicine and law at all" but, on the other hand, society also does not want to refer to "automobile repair as a profession because they don't want to

accord it that dignity" (p. 8). For this reason, Abbott refrained from giving the term a definitive definition. Instead, he loosely defined profession as "somewhat elusive groups of individuals applying somewhat abstract knowledge to particular cases" (p. 318). Crompton (1990) surmised that the contradictions between the definitions within sociological circles highlight general tensions in the sociologies of work, occupation, and employment. Regretfully, however, such a broad definition does not really provide individuals with criteria to support their judgment and this partly explains why other authors continue to define "profession" according to their impression of what a profession should be, following the attributes of already established professional groups. Nonetheless, it has not stopped members of other aspiring occupations, such as librarians and childcare workers, from pursuing this course (Becker, 2002, Shell, 2002).

2.2.3 Motivations for achieving professional status

From the numerous publications looking at several of these occupations (e.g. Beijaard et al., 2004, Liaschenko & Peter, 2004, Oweis, 2005, Wade, 1999), it might seem incredulous for these occupations to continue pursuing the path towards professionalisation after being challenged on the validity of attaining it. Presumably, the motivation to gain professional status is prompted from various perspectives, one of which may be to eliminate the perceived lack of fairness in compensation linked to occupation. As Svensson (2015) noted, inequality associated with occupations is rampant due to the distribution of rewards and privileges on the basis of class and status. This might explain Wilensky's (1964) argument that with the advancement of knowledge-based societies, many occupations face increasing pressure to achieve professional status, though only few occupations achieve this.

According to Noordegraaf (2007), there are two main objectives to achieving professional status; namely, to establish professional control (Freidson, 2001) and to establish occupational closure (Abbott, 1988), so that professional workers can govern themselves (self-regulation) and seek protection against external threats and interferences. Lester (2016) described self-regulation as an arrangement where society grants the professional group freedom from being regulated by external agencies, and in return the group will regulate the members' conduct according to their own set of principles, hence allowing the profession a certain degree of monopoly over their service in exchange for "conducting themselves in the public interest" (p. 1). Roosipõld and Loogma (2014) stated that by being professional, the occupation can operate at a higher status or position in society. However, society seems to

have been demanding flexible specialisation, cost control and performance management, thereby making the expertise more complex. Spada (2009) commented that on an altruistic level, "professions have played a big role in the development of meritocracy because of their emphasis on knowledge-based skills rather than social class" and "professions are a potential source of ethical role models via promulgation of professional standards, ethics and morality in business, government, and civil society" (p. iii).

Ferguson and Ramsay (2010) labeled the evolution towards professional status as professionalisation. Their understanding is aligned with Emener and Cottone's (1989) observation that "professionalisation is the process by which a gainful activity moves from the status of an occupation to the status of a profession" (p. 576). In a similar vein, according to Helding (2013), professionalisation is a "process by which a group of experts comes together to form an association whose purpose is to articulate and then maintain the highest standards in their discipline" (pp. 597-598).

Such a metamorphosis goes beyond external elements; it also involves internal revolution. Maister (1997) suggested that professionalism is less about competencies than "predominantly an attitude" (p. 16). Definitions have evolved that range from loose descriptions such as this through to Freidson's (2001) definition of professionalism as the state of existence when an organised occupation is able to determine who is qualified to carry out the work while impeding others from performing the same tasks by controlling the criteria to measure performance. Somewhat cynically, Freidson (2001) pointed out that monopoly is essential to professionalism and, fundamentally, it denies the operation of a free market. His logic extends that these organised occupations, or professions, "create(s) the circumstances under which its members are free of control by those who employ them". He creates an ominous prophecy that the market may adjust itself to prevent corruption by these groups of occupations, which coincidentally has been proven in recent times, such as the demand from society for transparency and consistency in professionals' approach to dispensing their duties (Vähäsantanen and Eteläpelto, 2015).

Mieg (2008) noted that frequently there is also an accompanying social recognition of an occupation as a profession as "professional identities reflecting the profession's image" (pp. 42-43). According to Beijaard et al. (2004) professional identity is an ongoing and dynamic process. It is one of the identities that a person holds and relates to the social position held within a social hierarchy.

The next section expands further on the perspective of identity theory, where it considers that an individual may hold many identities, which are invoked in different situations. Within this discourse, the candidate examines how the construct of professional identity blends into the other components of an individual's multiple identities.

2.3 The construct of identity

Being identified as a professional is perhaps a hallmark to an individual. One's identity is an important part of a person and is synonymous with knowing who one is (Burke and Stets, 2009). Colbeck (2008) added that it relates to the individual's role or position in society. Ferguson (2009) supported this view, describing the individual's self as like a "role in a theatrical sense" (p. 25), because it comprises the set of expectations applied to or tied to an individual who takes on a particular position in society (Van Sell, Brief, & Schuler, 1981) and guides his or her attitudes and behaviours (Burke and Stets, 2009, Manning, Parker, & Pogson, 2006, Stets and Burke, 2000). Understanding the attitude of a person towards each identity he or she owns is essential in explaining why he or she behaves in a certain way.

2.3.1 Roles and the occupational identity

During a lifetime, each individual adopts many roles and many associated identities. Mead (1934) first mooted the idea of role by explaining that the idea of who one is, or that of oneself, is a combination of many roles developed through interactions with the environment. One such position is social rank, which comprises a set of shared expectations in society or, alternatively, the stratum in the organisation that an individual occupies (Burke and Stets, 2009, Stets and Serpe, 2013). Other social positions might include student, spouse, and parent; however, there are also those that are less desirable such as alcoholic, criminal, or terrorist. Social positions may primarily be levels or categorizations based on the individual's interests, activities, or habits, such as activist, tennis player, or visionary.

Employment is one field where social position is central to understanding where one fits in the structure, and one key determining factor of this fit is the person's occupation or type of work performed in the course of employment. Each employed individual occupies a position known as an occupation, which describes his or her skills and activities. Many occupations that require long periods of pre-learning and a high level of skill, aim to differentiate themselves by claiming to have reached a higher status known as a profession.

2.3.2 Evolving occupational identity through role expectations

One of the challenges for occupations evolving into a profession, therefore, is that their occupation has not yet qualified as a profession; therefore, the values in these emerging professions might not yet be established as they are still in development. The members of this group will need to transition from their existing occupational identity into a new professional identity by adapting their existing role or adopting a new role. This could potentially cause confusion among the members and may result in an inconsistent reflection of the profession's image to those outside the group.

As an occupation traverses into the professional stage, expectations need to be established so that the members of that occupation and the society can understand that the occupation's position in society has risen. Sometimes there is more than one expectation associated with a social position, and these expectations may be specific or general in the behaviour to which they relate. They may require explicit interventions or serve as an outline within which much flexibility is allowed (Burke and Stets, 2009). For example, the basic obligation or expectation of a mother is that she provides the best care possible for her children. Some mothers may fulfill this expectation by being physically loving, while others may accomplish it through encouraging their children and supporting them in their schoolwork.

Expectations can be understood as mutually agreeable goals or outcomes that an individual should achieve in a role, without explicit guidelines for how those outcomes should or could be achieved (Burke and Stets, 2009). For example, a project manager is expected to handle project deliverables under time constraints without specific instructions on how to operate with minimal direct authority over resources, or how to deal with stakeholder demands. Expectations can also relate to a large or a minimal part of an individual's scope of interactions. For example, the role of a male is understood as somewhat dominant, assertive, and controlling (Stets, 1995) and these expectations are applicable to a wide scope of interactions including those at home, at school, at work, and with other individuals. In contrast, the role of a professional society member carries with it expectations that are typically relevant to individuals who are members of that professional society. As a result, they are applicable to a narrower scope of interactions (Burke and Stets, 2009). In the case of professional rugby players, for example, players may feel the need to portray the sport as masculine and tough (Brown and Coupland, 2015) and will maintain this image as long as they feel associated with the identity.

As a result of the agreed expectations, individuals need to internalise the role to characterise themselves (Burke and Reitzes, 1981, Burke and Stets, 2009) according to these expectations (Stryker and Burke, 2000). Internalizing the role would encompass gaining the required skills and behaviour and keeping abreast with the developments in that role. For example, professional rugby players will keep themselves fit by going to the gymnasium regularly and practising the sport. They are also conscious of their performance. They constantly monitor themselves and evaluate their capabilities in order to seek improvement (Brown and Coupland, 2015).

For an emerging profession, however, the set of expectations might not yet be well established. The challenge, then, is for the individuals in the professional journey to have a consensus on the agreed set of characteristics or traits that their profession should have. Therefore, one relevant question for project managers is whether there is any a common agreement about their expectations.

2.3.3 Challenges in holding multiple identities

In addition, there are many occupations and professions that hold multiple identities within the one position, for example a doctor may also be a teacher and a systems analyst can also be a given a project manager position. The idea of multiple identities has been established by many theorists; for example Burke (1991), Corley (2004), Owens, Robinson, and Smith-Lovin, (2010), Stets and Harrod (2004), Stryker (1980), Stryker and Burke (2000), Tajfel (1978), and Whetten (2006). Individuals may hold multiple identities because of the number of groups within which they engage in distinctive roles (Stryker and Burke, 2000). The collection of identities assumed by an individual is best understood as an interconnected system, and within this complex system, the various components are sometimes highly dependent on one another and sometimes they are not. This multiplicity of identities affects both individuals' self-perceptions and how others view them (Josselson and Harway, 2012).

Stryker (1980) depicted individuals as organising their multiple selves or identities into a hierarchy. He added that individuals' identities are organised on the basis of identity salience, and their readiness to act out identities is dependent on the level each identity occupies in the overall hierarchy, or according to where their identities are placed in the overall identity hierarchy (Harmon-Kizer, Kumar, Ortinau, & Stocket, 2013). The hierarchy is arranged by the individual in terms of the probability of it being invoked in a given situation or a series of situations. The higher that identity is in the hierarchy, the more salient

it is and the more likely it is to be called upon. Less prominent or less salient identities within the hierarchy are less important and temporal in nature (Settles, 2004) and they are often considered to be peripheral to an individual's overall self-concept (Harmon-Kizer, Kumar, Ortinau, & Stock, 2013). Therefore, the salience of an identity is basically the probability or likelihood that the identity will be activated across a variety of situations (Burke and Stets, 2009, Morris, 2013b). For example, if a technology workshop and a project meeting are held on the same day, the project manager may need to consider whether his identity as a technology analyst or project manager is more important to him and decide based on the position of these identities in his identity hierarchy. This is because identities that are higher on the salience hierarchy are more likely to be activated or enacted (Morris, 2013b).

Multiple identities may also lead to identity conflicts, especially if they have contrasting expectations, and an individual is likely to experience stress. According to Stets and Carter (2011), such inconsistencies or conflicts may produce negative emotions and motivate individuals to behave differently to produce outcomes that will better match their identity meanings. With reference to the previous example, the project manager might feel stressed if both his technology analyst identity and his project manager identity are equally important to him. According to Stryker's exposition of identity theories, the project manager will activate one identity if his commitment to that identity is higher than the other. In other words, if one identity is more important than another in that context, then verification of that identity is more important than verification of the other identity (Burke and Stets, 2009).

2.3.4 Commitment to identit(ies)

Allen (2011) and Morris (2013b) extended the idea of commitment by introducing two additional concepts: interactional commitment and affective commitment. The concept of interactional commitment (also known as extensiveness) refers to the number of social connections or relationships associated with a particular identity (Colbeck, 2008, Serpe, 1987). As Stryker and Burke (2000) stated, "this aspect of commitment reflects density of ties, a characteristic of the social structure in which an identity is embedded" (p. 289). The concept of affective commitment (also called intensiveness) denotes the importance of others to whom an individual relates, through occupancy of a given social position (Stryker, 1980). As such, the individual's project manager and technology analyst identities would be in conflict, and to favour one identity over the other may require adjusting his or her self-perception of the other identity. Therefore, commitment reflects the relative costs of giving

up or losing possession of a role identity; greater identity commitment results in greater identity salience (Morris, 2013b); and commitment to a particular role identity is high when individuals perceive that many of their significant, intense, or emotionally positive relationships are based on occupancy of that role (Allen, 2011). In this sense, most individuals have a multiplicity of identities that affect self-perception and how others view them (Josselson and Harway, 2012).

On the other hand, simultaneous activation of two identities with similar levels of salience and commitment will cause less overall stress when these identities involve shared meanings (Colbeck, 2008), because shared meanings allow communication as well as shared understandings and expectations (Burke, 2006). For instance, if the project manager's objectives include conducting research on project-related topics and the project organisation also values scholarly research on project work, the project manager's identities as project manager and researcher will be consistent and mutually reinforcing (Burke, 2003). Although still needing to prioritise between activities because of time and resource constraints, the project manager may be able to negotiate with the line manager/s to determine which activity will be appropriate for his or her professional development. Similarly, Burke and Reitzes (1981) showed that the relationship between multiple identities and behaviour lies in the shared meanings of each, as individuals engage in behaviour to create meanings that correspond to the meanings of their respective identity standard. Therefore, in the case of an occupation developing into a profession, the expectations of the new identity as a profession should be consistent and reinforce the existing identities in the occupation.

According to Burke and Stets (2009), when individuals do not obtain verification for the multiple identities they claim, they will become less satisfied with their roles and may withdraw from an interaction. Identity verification in this context occurs when the perceptions of an individual in a role are consistent or in agreement with the individual's own identity standard meaning. In addition, identity verification is a result of not just an individual's own action but of an individual's action in relation to others' actions (Stets and Cast, 2007). Herein lies the challenge to ensure consistency in the roles that a professional identity may hold and for occupations to transition into this identity, especially if the roles have conflicting expectations. Furthermore, an occupation that is transitioning towards professional identity may experience lack of verification of the identity itself; hence the group may lose members during this journey.

An individual's multiple identities may be beneficial when they are successfully verified (Stets and Harrod, 2004), whereas competing demands of multiple roles (identities) will increase the distress of individuals (Burke and Stets, 2009), and they will experience negative emotions (Stets and Carter, 2011). Discrepancy among the multiple identities presents challenges for identity verification and can be harmful to an individual's well-being (Rogalin and Keeton, 2011). When an individual is simultaneously engaging in multiple identities, mixed emotions are likely to occur (Smith-Lovin, 2007). Furthermore, identity verification is further complicated by the multifaceted nature of society and themselves; modern complex societies make available a large set of possible identities (Rogalin and Keeton, 2011). However, as Smith-Lovin (2003) pointed out, the ecology of identities is not spread equally throughout complex modern societies. For instance, primary school students have fewer identities available to them than are available to university students and individuals who have access to more resources, which they may employ to access more identities thus adding to their number of identities (Burke and Stets, 2009).

As Rogalin and Keeton (2011) highlighted, "given the multiplicity of statuses held by any individual, and the differing demands created by the role sets of any given social position, it might seem that most individuals would remain in a state of constant conflict and strain" (p. 3). Considerable research within role identity has examined the impact and management of this multiplicity of roles (Burke and Stets, 2009, Ellemers and Rink, 2005, Rogalin and Keeton, 2011, Smith-Lovin, 2003, Smith-Lovin, 2007, Stets and Carter, 2011, Thoits, 1983, Thoits, 1986, Thoits, 1991). In some cases, research has shown that having multiple identities can have positive effects on an individual's well-being (Ellemers and Rink, 2005, Thoits, 1986), whereas other research demonstrates a negative effect (Stets and Carter, 2011, Thoits, 1983, Thoits, 1986). Rogalin and Keeton (2011) pointed out that the variance in the impacts of role conflicts may be explained by differences in how the identities related to those roles fit into the individual's self-structure, and by the individual's success at handling competition or conflict among their roles and identities. Ellemers and Rink (2005) claimed that the activation of an individual's salient identity does not necessarily distance that individual from his or her other identities, although Rogalin and Keeton (2011) suggested that a situation where multiple identities are salient might result in the need to create a new blended identity to supersede these identities. The construction of this new blended identity is shaped over time, across many interactions, and requires negotiation and validation from others. This phenomenon might occur when a new professional identity is created from the

former occupation identity through evolution, and perhaps also through multiple identities that need to blend to form one professional identity.

Therefore, developing a sense of shared meanings across multiple identities and integrating the identities associated with various roles that an individual undertakes when in employment may help to enhance an individual's work efficiency and effectiveness (Colbeck, 2008). In other words, professional identity encompasses what it means to be a professional in a qualifying profession (Krejsler, 2005) and represents the sets of values and emphases of that profession (Mrdjenovich and Moore, 2004). The next stage of this literature review builds on this growing body of work to examine the professional identity construct.

2.4 Professional identity

As its name suggests, professional identity is that component of identity that relates to one's profession. Each individual participates in a unique experience in developing professional identity (Chambers, 2014). Ibarra (1999) suggested individuals might use provisional versions of their professional identities before assuming fully elaborated professional identities through rehearsal and experience. Beijaard, Meijer, and Verloop (2004) supported this view by indicating that professional identity is an ongoing and dynamic process. The process of iteration before settling on a stable identity is an unavoidable characteristic of individuals who are new to a profession and those in an occupation that is progressing to a profession. Canrinus, Helms-Lorenz, Beijaard, Buitink, and Hofman (2011) suggested that "job satisfaction, self-efficacy, occupational commitment, and their levels of change in motivation" (p. 593) should shape professional identity.

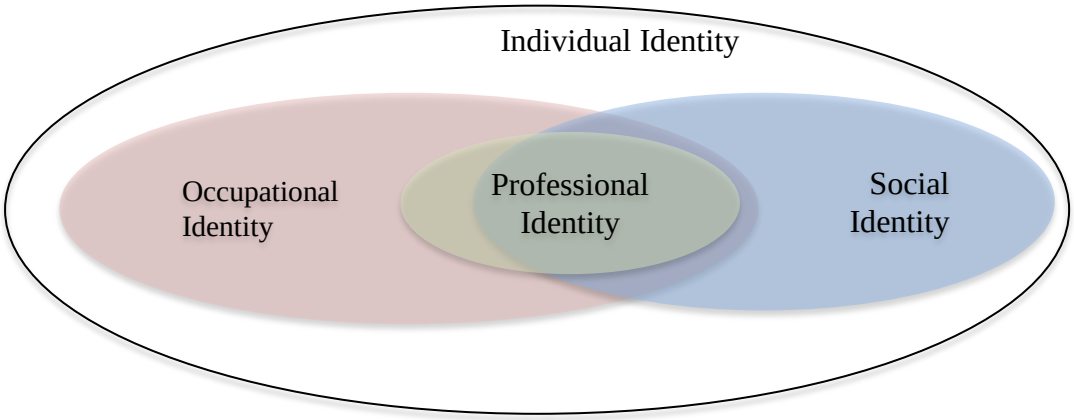
According to Cohen (2008), professional identity is a formal role identity that individuals acquire as they assume different roles in full-scale professions, such as those of medical doctors or lawyers. This opinion is further confirmed by Chreim, Williams, and Hinings (2007), who said that "strong identification inducement processes shape the identity of members of developed professions" (p. 1517). Krejsler (2005) further claimed that there are increasingly close links between an individual's identity within a given profession and the professional characteristics of that profession. These characteristics are shaped when members of an occupation experiment with and refine them in response to the feedback they get from society. Olesen and Whittaker (1970) termed it 'enculturation', whereby the occupation matures while learning to become a profession through social and cultural interaction. According to Stets and Cast (2007), identity verification is a result of not just an

individual's own action but of an individual's action in relation to others' actions. Often, institutionalised beliefs and values define the roles and expectations of member actions (Limberg et al., 2013). Basically, they clarify the expectations that all parties would agree upon for that identity.

The challenge for these occupations is during the discovery stage, when members are subjected to constant struggle to construct acceptable expectations for their professional identity. Established professions went through these processes, charting the way for budding professions, enabling other occupations to emulate the steps to obtain the professional identity.

In summary, identity theory explains the concept of identities that individuals hold within themselves and there are various challenges faced by individuals whose identities conflict. The individuals' commitment to these identities will determine how well they will conform to expectations of that identity. The expectations of a particular identity are closely associated with the expectations of society of the role that identity is supposed to play. As the individual displays the role, society will give feedback whether or not the behaviour is acceptable, and these interactions contribute to shaping the role. One of the roles that individuals play relates to their occupational identity. The occupational identity makes up one of the individual's identities. Parts of the occupation identity relate to how it interacts with society, hence the individual's occupational and social identities overlap. Within the occupational identity lies the professional identity. The evolution of the professional identity relates to how it negotiates its status with society, in accordance with the expectations from the society. Therefore, the professional identity also overlaps with the social identity. An overview of the relationship between identity theory, social identity theory and professional identity theory is depicted in Figure 2.1 below.

Figure 2.1: Identity theory, social identity, occupational identity and professional identity



2.4.1 The journey towards professional identity and professionalisation

To generate further insights into what constitutes a profession and the changing nature of employment resulting from technology use, globalisation, outsourcing, government initiatives, and liberation of the economy (Clott, 2004, Landry, Mahesh, & Hartman, 2005, Lynch and Smith, 2001, Marks and Huzzard, 2010, Richardson, Clulow, & Karpathiou, 2013), the candidate draws upon theories of professionalisation in an attempt to identify (a) the traits or attributes that set apart a profession from an occupation; (b), the process through which an occupation becomes a profession; and (c), the forces that contribute to professionalisation.

In order to keep up with these developments, many companies, academic institutions, and professional organisations have proposed various professionalisation initiatives to maintain and enhance working practitioners' skills and knowledge, including training programs (Weinberger, Smith, & Collier, 2006), certification programs (Ferguson and Ramsay, 2010, Legault and Chasserio, 2012), and postgraduate education (Ng, Koo, & Ho, 2009, Ng, Koo, & Pallis, 2011). Although professionalisation has grown over the past two centuries (Tobias, 2003), we do not know whether a particular practice will successfully attain full professionalisation (Mieg, 2008). This has been a research area characterised by much discussion and debate (Pohler and Willness, 2014), especially with regard to borderline contenders such as pharmacist, librarian, or accountant.

To date there have been three main approaches to addressing the question of how occupations transform themselves to achieve professional status; namely, attribute models, process models, and power and market models (Curnow and McGonigle, 2006, Emener and Cottone, 1989, Thomas and Thomas, 2014). Each approach is further examined next.

2.4.1.1 Attribute models

Attribute models of professionalisation distinguish the perceived traits, features, or characteristics that describe a profession from those describing other jobs and occupations (Cleary, 2012, Emener and Cottone, 1989, Tobias, 2003). The fundamental issue that arises from these arguments is that the delineation of particular occupation as a profession lies in the definition of "profession". Researchers have tended to employ a common representation of what a profession is, based mainly on the traits approach (Etzioni, 1969, Goode, 1960, Greenwood, 1957). In 1960, Goode studied the numerous definitions and characterised a

profession as comprising the following ten traits that an occupation would need to acquire to become a profession, and stated that these are closely interdependent:

1. The profession determines its own standard of education and training.
2. The student professional goes through a more far-reaching adult socialization experience than the learner in other occupations.
3. Professional practice is often legally recognised by some form of licensure.
4. Licensing and admission boards are staffed by members of the profession.
5. Most legislation concerned with the profession is shaped by the profession.
6. The occupation gains in income, power, and prestige ranking, and can demand higher caliber students.
7. The practitioner is relatively free of lay evaluation and control.
8. The norms of practice enforced by the profession are more stringent than legal controls.
9. Members are more strongly identified and affiliated with the profession than are members of other occupations with theirs.
10. The profession is more likely to be a terminal occupation. Members are loyal to the profession, and a higher proportion assert that if they had to do it over again they would again choose that type of work.

However, according to Curnow and McGonigle (2006), attribute models of professionalisation "tend to limit which occupations are considered professions because they require that all of the criteria set forth be met" (p. 287). Furthermore, Martimianakis, Maniate, and Hodges (2009) added that attribute models of professionalisation give little consideration to the causal relationship among the various elements on the list of traits that an occupation needs to acquire to become professionalised.

Hall (1968), who made reference to Wilensky's (1964) attribute model, included some attitudinal attributes in his professional model, such as the use of professional organisation as a major reference, a belief in service to the public, belief in self-regulation, a sense of calling to the field, and autonomy; however, the attitudinal attributes basically measure the degree of professionalism from the practitioner's perspective. It did not lend any further insight into professionalisation. To address the limitations of the attribute models' approach to professionalisation, process models emerged.

2.4.1.2 Process models

Compared to attribute models, process models employ a more flexible view of professionalisation, as they state that that all occupations may display some or certain features of a profession. Rather than highlighting the traits, features, or characteristics of professions, process models describe a continuum of professionalisation (Curnow and

McGonigle, 2006) or the process through which an occupation becomes a profession (Ritzer, 1977). According to Hwang and Powell (2009), process models are central to the professionalisation journey and are basically a sequence of meaningful events and an evolving form of social organisation. Process models illustrate the steps involved in the process of professionalisation, though researchers may disagree about the order or sequence of the steps.

For example, from his examination of the history of 18 occupations, Wilensky (1964) uncovered the following five crucial steps or meaningful events that are often observed when an occupation strives towards professionalisation:

- An occupation becomes full-time work.
- Formalised training develops, often occurring in higher education settings.
- A professional association emerges or is formed.
- Support from state-sanctioned legislation reinforces and builds public identity and self-boundaries.
- A formal code of ethics is adopted or developed.

This model of professionalisation illustrates the process from its beginning as a group of workers involved in similar work activities, through to a formalised profession with an established code of ethics and engagement in sanctioned political activity to protect its share of the market. Although the sequence of meaningful events is ideal, sometimes these events or steps occur at varying degrees during the course of professionalisation. For instance, a particular state-sanctioned legislation might be amended, affecting a profession by leading to, for example, a formalised training or education program for that profession. As observed by Hwang and Powell (2009), the process model of professionalisation for non-profit organisations "often begins with volunteers and amateur staff" (p. 273) before progressing towards professional status. In addition, Thomas and Thomas (2014) noted that these process models "involve a twin-pronged strategy that seeks occupational closure and an increasing degree of occupational control" (p. 40).

2.4.1.3 Power and market models

Power and market models, the last category of professionalisation models, diverge from the approach of both attribute and process models, opting to concentrate on rationalisation and bureaucracy (Tobias, 2003) to illustrate how professions are created. They have also been referred to as modelling corporate professionalisation, whereby "organizations that employ

professionals use their power to shape the value and practices of the profession" (Thomas and Thomas, 2014, p. 41) and "organizations seek to institutionalise appropriate professional roles and identities as part of their attempts to motivate and manage their workforces" (Muzio, Brock, & Suddaby, 2013, p. 714). Curnow and McGonigle (2006) summarised the power and market models as follows:

- Development of specific knowledge
- Specialised knowledge and skills
- Systemised/standardised training of practitioners
- Restricted supply of services
- Standardised body of accredited knowledge
- Monopoly of services.

Decades earlier, Johnson (1973) had reconceptualised the idea of a profession, stating that it is not so much an occupation itself, but rather a mode of controlling an occupation. According to Curnow and McGonigle (2006), rather than explaining something that exists (attribute models) or describing how something evolved (process models), the power and market models illustrate how typical professionalisation may be executed. Likewise, Ritzer (1977) highlighted that the power and market models conceptualise a profession in terms of the "ability of an occupation to obtain a set of rights and privileges from societal groups that might not otherwise be granted them" (p. 56).

As posited by Larson (1979, 1990), the growth of professions and the professionalisation of successive occupations are one aspect of the rationalisation of capitalism. This is viewed as a bid to justify the social and economic rewards as a remuneration for specialised knowledge and skills, thereby converting one order of limited resources into another (Curnow and McGonigle, 2006). Such monopolistic tendencies explain why different strata have emerged within a society, with some occupations becoming more desirable than others in a system of stratification.

Likewise, the power and market models locate the origins of modern journeys of professionalisation in the increasing commodification of goods and services prompted by the rise of capitalism in the late 18th and 19th centuries as a result of the process of globalisation (Faulconbridge and Muzio, 2012), and the increasing commodification of goods and services in the 20th and 21st centuries (Tobias, 2003). Moreover, according to Covaleski, Dirsmith, & Rittenberg (2003), who cited earlier work on the literature of professions by both Abbott (1988) and Freidson (1994), the key to survival and the claim to professional status is the

development and maintenance of an abstract system of knowledge that helps establish a profession's jurisdiction. Similarly, as Larson (1979) pointed out, for a profession to maintain its share of the market and be successful at professionalisation, it is necessary to have systematic training and a body of knowledge that is standardised and accredited.

2.4.1.4 Summary of models

All three models of professionalisation—attribute, process, and power and market—accord great importance to formalised training and educational programs (Curnow and McGonigle, 2006, Tobias, 2003). They build on the ideas of Eraut (1994), who claimed that the role of professional education and particularly continuing professional education is to maintain contact between practising professionals, and new knowledge and ideas. Saks (2012) ventured further and indicated "the key to the definition of a profession remains the sheltered position of professions in the market place, with entry to the professions usually gained through obtaining relevant higher education credentials" (p. 4). Besides education, Svensson (2015) added that governmental laws and statutes, and even state licenses and laws, are required to legitimate professions politically.

Although the attribute models' approach to describing and distinguishing professions is the most accepted and is considered a sensible means of delineating professions from other occupations (Cleary, 2012, Emener and Cottone, 1989, Tobias, 2003), it has several drawbacks. These include its over-emphasis on outcome rather than process, ascribing characteristics that even long-established professions do not always achieve (e.g. losing professional autonomy as a result of bureaucracy) and describing professions generically according to a set of categories that ignore individual differences among practitioners (Hall, 1968). As highlighted by Vähäsantanen and Eteläpelto (2015), the expectations from society have "become more uncompromising since new management principles have tended to limit professionals' autonomy" (p. 1). In their study of teachers, they noted that one of the participants' educational institutions controlled the content of the teacher's work by dictating how it should be developed, hence restricting the teacher's autonomy to design the curriculum according to his or her expert knowledge.

The concept of autonomy is similar to the concept of discretion (Wallander and Molander, 2014, Mastekaasa, 2011). Both indicate that the professionals are given the liberty to exercise their own judgment in making any decision within their sphere of expertise. As such, "discretion is frequently portrayed as lying at the heart of professional work"

(Wallander and Molander, 2014, p. 1) and "autonomy is thus simultaneously a privilege and a responsibility to act in the best interests of the society" (Funck, 2012, p. 4). While discretion is often construed as a positive aspect of professionalism, critics have expressed concern at the fairness of treatment to the consumers. Professional decisions are subjected to biases that could be influenced by individual intuitive judgment. These are somewhat reduced by continuous engagement between the members of the profession to rationalise the basis of a decision to arrive at the same conclusion about, say, a diagnosis or treatment plan, hence ensuring consistency in practice among the members. However, there is also new evidence showing that professionals disagree in their judgment (Wallander and Molander, 2014). In their study on healthcare professionals who need to determine whether there are any signs of elder abuse in their clients, Wallander and Molander (2014) noted that professionals are often presented with their clients' individualised needs and myriads of options, on top of their own professional guidelines, which they have to follow. In turn, standardisation of the service may not always be possible, hence the need for professional discretionary judgment or the autonomy to address complex situations in delivering the service (Roosipõld and Loogma, 2014). As Funck (2012) eloquently phrased it, "to abolish professional autonomy, or the ability to make decisions based on discretionary judgment, is to abolish the possibility of carrying out professional work" (p. 1). Her sentiments were echoed by Mastekaasa (2011), who added that autonomy contributes to the quality of expert decisions, which justifies the economic and social advantages and privileges of being professionals. Furthermore, as indicated by Tobias (2003), the process view of professionalisation is less elitist than the attribute approach. However, they both remain highly functionalist. According to Eraut (1994), the highly functionalistic approach "accord[s] primacy of place to the professional knowledge base" (p. 1).

By contrast, the power and market models of professionalisation reject the functionalist perspective inherent in the traits approach employed by both the attribute models and process models, and instead focus on rationalisation and bureaucracy to illustrate how a profession is created (Tobias, 2003). Such a perspective also relates to a shift from national to international orientations (Faulconbridge and Muzio, 2012, Thomas and Thomas, 2014), with the increasingly globalised nature of organisations that rely on expert knowledge-based labour (Paton, Hodgson, & Cicmil, 2010) and professionalisation within the organisational context (Muzio et al., 2013). As described by Gaglio (2014), more professional work is taking place in organisations because of the dominant corporation model in

capitalism. The "organisational professional" (or corporate professional) has emerged due to the link between organisations and professionalism, thereby diluting the traditional definition of professionalism "owing to the influence of organizational logics" (Gaglio, 2014, p. 2). Evetts (2010) characterised organisational professionalism as the incorporation of authority and structures of responsibilities in decision-making, including standardisation of work procedures and practices with control put in place by management, and the need to produce key performance indicators to external regulators as a form of accountability as an organisation. However, this method of engagement between the organisation and professionals does not eradicate the traditional definition of professionalism, in which the profession still retains a substantial amount of control over their work and enjoys a high degree of autonomy (Faulconbridge and Muzio, 2008). Hence, where criteria beyond their control (e.g. state-sanctioned licenses or regulation) continue to elude them, the concept of the organisational professional could define the pathway for emerging knowledge-based professions that consistently fail to meet all the requirements set by attribute models and process models.

What all models have in common are beliefs that a profession needs to have methods of training to maintain and control its market share and hence be successful in professionalising (Larson, 1979). Tobias (2003) concluded that the "processes of bureaucratization and professionalisation are interdependent and all professions are, today, to a greater or lesser extent bureaucratized" (p. 453).

In summary, these theories of professionalisation help build an understanding of the various aspects, states, and stages of the professionalisation journey. The models of professionalisation can be viewed as tools that help explain how occupations become stratified, with some becoming more desirable than others; why a person may strive to join a professional group that is seen or deemed as exclusive; and why a person might want to achieve or attain professional status.

Regretfully, however, the discussions on these models lack insight into the individual struggles to attain the attributes that form a key part in attribute models, execute the crucial steps in process models, and pursue to control the occupation through the bureaucracy of the power and market models. In this research, the interest is directed to understanding the individuals' perspectives on what is expected of them in the role, their level of motivation to go through the process of professionalisation, and their confidence in attaining the desired outcome. As interest in embarking on professionalisation continues to be the goal of many

workers, based on the perceived economic and status advantages (Cleary, 2012, Larson, 1979, Pohler and Willness, 2014, Wolf, 2008, Woo, Henfield, & Choi, 2014), the trend is to study the experiences of previous professions to find similarities and gain an understanding of how to follow a similar pathway (Macdonald, 1995, Mieg, 2008, Tobias, 2003).

Clearly, therefore, for the journey towards professional status to succeed, aspiring occupations would need to follow a series of well-trodden pathways, reach a list of desirable attainments and gain the support of established authority in some form. The next section examines the pathway travelled by three long and well-established occupational groups in their journeys to achieve professional status. It attempts to better evaluate to what extent the models discussed above have contributed to understanding the success of these journeys, and to understand the contribution of individuals to professionalising their occupations.

2.5 The professionalisation journey

With the exception of medicine and law, few occupations have achieved professional status, and they have become the benchmark and model for emerging and future professions (Abbott, 1988). This section reviews the history of three occupations: medicine, law and nursing. The professions of medicine and law have undoubtedly attained their professional status, but the challenge is in maintaining that status. The validity of nursing's professional status has undergone many debates (Hugman, 1996, Takase, Kershaw, & Burt, 2001, Warne and McAndrew, 2004) and the majority of researchers now agree that the status assigned to nursing is that of semi-professionals (Hugman, 1996, Morris et al., 2006). The final section in this summary will explore the circumstances kerbing the nursing profession from attaining full professional status.

2.5.1 The medical profession

Consideration of the experiences of other professions begins with medicine, because this is one of the longest established professions (Sim and Radloff, 2009). Individuals in the legal, social sciences, and health care fields have suggested that "professionalism serves as the basis of medicine's relationship with society, and many have termed this relationship a social contract" (Cruess and Cruess, 2008, p. 579).

2.5.1.1 The construct of medical identity

It is quite difficult to precisely define and explain the term "medical professionalism". Professionalism, in this case, refers to the professional character. Dreyer (2010) noted that "often professionalism is understood as something vague" (p. 21). As concluded by Rowley, Baldwin, Bay and Karpman (2000) in their analysis of professionalism and professional value in medicine,

> … it has become embarrassingly clear that there is no clear, concise, and currently relevant definition of professionalism around which to rally … [almost] everyone has in mind certain quality or values that exemplify professionalism and some of these achieve a certain consensus … [; and yet] significantly different views remain concerning which qualities or values are the most important and whether, or perhaps especially how, these can be taught to future physicians. (pp. 90—91)

MacKenzie (2007) believes that "professionalism as it pertains to medicine remains difficult to define with precision" (p. 224), and Riley and Kumar (2012) consider the term "medical professionalism" as "notoriously difficult to define and remains poorly understood" (p. 9). In this context, it is evident that the apparent lack of consensus on what is professional in the medical field could stem from a deficiency in the definition of a social contract between the medical group and society. It aligns with identity theorists' (Burke and Stets, 2009, Stets and Serpe, 2013) viewpoint that an identity an individual occupies needs to have the same level of shared expectations with society, and the evolution of these expectations coincides with a change of environmental factors. It would be potentially more daunting to individuals of emerging professions because such expectations may be more volatile during the professionalisation stage.

The question immediately arises as to what constitutes a shared construct of medical professionalism. Basically, it would seem to encompass "behaviours and values that doctors should exhibit as well as highlighting the role of knowledge, skills and judgment" (Riley and Kumar, 2012, p. 9). Medical professionalism has also been described as "the practise [sic] of doing the right thing, not because of how one feels, but regardless of how one feels" (DeRosa, 2006, p. 29). Correspondingly, according to McDonagh (2008), medical professionalism is an action that defines "our relationship as a physician to our individual patients and our relationship to society" (p. 6). To further complicate matters, according to Dreyer (2010), the perspective on professionalism in the United Kingdom is different from that in the United States. Much of the literature originates in these two countries and there are differences between the various areas of research. To reconcile these differences, in his

research on assessing professionalism in surgeons, Dreyer (2010) highlighted that "before professionalism can be assessed it should be adequately defined and described" (p. 20). In Singapore, Mack (2006) reflected that "the professional ideal in Medicine is not easy to define. It has to be defined in terms of basic pattern of intellectual and moral virtues that disposes a practitioner to act in the way idealized in our code of professional ethics" (p. 4).

2.5.1.2 The history of medical professionalisation

In tracing the journey of medical professionalism, it would seem that the period leading to mid-19th century healthcare in Britain was a relatively unregulated and open environment in which it was difficult to distinguish between regular and irregular medical practices, even in terms of practitioners' educational backgrounds and qualifications (Porter, 1995). Similarly, British medical education was a highly decentralised system of training (Waddington, 1990). Furthermore, Flexner's 1910 report on American medical schools revealed that there were inadequate medical instructional methods and facilities, lack of medical curriculum standards, and overproduction of uneducated and poorly trained medical practitioners (Gallagher and Bailey, 2000).

At the beginning of the 19th century (Waddington 1990), there was considerable concern by doctors that the profession was overcrowded and that unqualified practitioners were creating competition and harming the integrity of the profession in the United States. It was during this time that the members of the medical profession were discovering their identity and trying to distinguish those who belonged to it from those who did not qualify. As posited by Burke and Stets (2009), expectations of identity need to be agreed upon by the individuals who will enact the role. By standardising the characteristics of the role, they can exclude individuals who do not possess them while imposing them on those who want to belong to this group. This aligns with attribute models and process models where the profession forms their own professional association and determine their membership, as well as licensing those who can practice the trade.

Medicine formally achieved professional status in the mid-1920s in the United States and in 1945 in Britain (Macdonald, 1995). Singapore's first glimpse of Western medicine was in 1819 with the arrival of Sir Stamford Raffles and the setting up of a military hospital with doctors for the army; access to medical services was limited to the privileged few (Ministry of Health, 2015). The practice of medicine was not formalised until the establishment of the Singapore Medical Association in 1959 (SMA, 2015). Similarly,

according to Hall (2010), it was the formation of the American Medical Association (AMA) in 1847 that signified the beginning of medical professionalisation in the United States. Although the process of professionalisation is often accompanied by much discussion and debate, there is general consensus that the process of professionalisation basically involves two parties: (a) the hopeful profession and (b) the state, which has the sole right to issue licenses or create professions (Timmons, 2010). As pointed out by Macdonald (1995), "professions aim for a monopoly of the provision of services of a particular kind; monopolies can only be granted by the state, and therefore professions have a distinctive relationship with the state" (p. 66). The process models have described the legislation that the profession would need to establish with the state. The profession would also need to get support from the state to reinforce the legislation and build public identity and self-boundaries. Therefore, based on the medical profession's experience, this step would appear to be crucial to establishing professional status. It is further reinforced by the power and market models, where the emphasis is on bureaucracy and maintaining the profession's share in the market.

In the United States, widespread demands within the medical profession for the institutionalisation of a system of registration and the stipulation of minimum formal education or training requirements led to the introduction of the Medical Registration Act of 1858. This Act provides a good example of how the medical profession obtained a monopoly by unifying the disparate general practitioners, physicians, and surgeons via a single register, self-regulation, and a system of formal education administered and controlled through the General Medical Council (Saks, 1999, Waddington, 1984, Waddington, 1990). Likewise, in Britain, the introduction of the US Medical Registration Act (1858) influenced the extension of the British General Medical Council's control to other areas of medical work, such as the effective enforcement of a code of medical ethics within medicine (Waddington, 1990). In this aspect, the medical practitioners were able to establish their own boundary in managing the practice of medicine through concerted effort. Even though both the attribute models and process models detailed aspects of the achievements in getting professional status (e.g. higher education settings, self-regulation, and licensing), the models did not consider the group's commitment to consolidating their differences through a single governing body. Morris (2013b) posited that the greater the commitment from the individuals in the group, the greater is the identity salience to them and vice versa. This is clearly evident in the situation of the medical profession: once a high level of identity association was achieved between the

members and the profession, the strength of this relationship enabled the profession to unify the control of the practice of medicine into one governing body.

Once Western medicine achieved professionalisation, the rival healthcare practices of homeopathic, osteopathic, naturopathic, and chiropractic medicine suffered and almost perished at the hands of the dominant evidence-based, disease-focused approach to medicine (Freidson, 2001, Regenberg and Mathews, 2005, Waddington, 1990). This is an example of how characteristics defined in attribute models allow the profession to demand power and prestige in ranking above other occupations.

In the movement towards the professionalisation of medicine and subsequently numerous other occupations, a critical next step was the establishment of a professional accountability system of preparation and practice (Darling-Hammond, 2000). In their article on strategic philanthropy and public policy making, Gallagher and Bailey (2000) described how the road to the professionalisation of medicine in the United States relied on the cumulative efforts of the AMA's Council on Medical Education in assisting Flexner's (1910) research on medical education. This led to the institution of a system of certification or licensing and encouraged states not to permit graduates of poor quality from medical schools to practice. The attribute model is clearly reflected in this aspect, whereby professional is defined as a group that can demand a higher calibre student by gaining power and prestige in ranking.

On the other hand, in Britain, recent sustained criticism (Allsop, 2006, Chamberlain, 2012) has been directed at the General Medical Council as a symbol of self-regulation. It regulates the medical profession on behalf of the state and, in particular, within the National Health Service (NHS), which has a powerful and dominant influence within the health care decision-making structure (Allsop, 2003). This criticism had stemmed from the prevalent impression that self-regulation leads to self-protection and lack of transparency in the way it is governed (Allsop, 2003). For example, the certification and licensing of medical education by the General Medical Council in some foreign jurisdictions (Stacey, 1992) and its empowerment by an Act of Parliament indicated that the General Medical Council was assigned to carry out registration, periodic review, certification, and discipline functions (Allsop, 2003, Chamberlain, 2012).

As noted by Moran (2003), the professional regulation or accountability system has "historically been a national matter, or, to be more precise, has been confined to the boundaries of the nation state" (p. 20). However, the responsibility for regulating and

designating who is qualified to practice in medicine is complicated due to, among other aspects, the presence of different types of certification and licensing schemes and alternatives (Zwerman et al., 2004b).

2.5.1.3 Challenges in the medical profession

McGhee (1995) noted that, having formally obtained "professional status [medicine] also carries negative implications and is currently being subjected to more and more criticism". Many people "outside the established professional groups tend to view practitioners as elitist, status-seeking and geared towards the creation of monopoly specialist territories, which each group rules over and defends with great vehemence" (p. 28). Moreover, it is widely acknowledged that the increasing demands of political, legal, market forces, hospital management, and government regulation are asserting great pressure on the practice of medicine (Hafferty, 2006, Numerato, Salvatore, & Fattore, 2012, Rowley et al., 2000). In consequence, preventive measures through public health have shown to improve health significantly more (5 times more) than interventions by medical professions (Lim, 2013). Hence, the value of medical practitioners in keeping the population healthy is criticised as over-emphasised. It would appear that, ironically, the very aspect of attribute models, process models, and power and market models whereby the profession was said to gain the autonomy to practice, and to control the licensing and regulation, are also the very features of professionals that are not always acceptable to society.

In the United States, advances in the science and practice of medicine have had major repercussions in the evolution of law. For instance, physicians now face stricter standards of professional accountability for medical malpractice or negligence. In addition, they are no longer being sheltered from the laws of competition (Rosenbaum, 2003) and there has been a decrease in the autonomy of practising physicians (Rosenbaum, 2003, Timmermans, 2005). Furthermore, according to Cruess and Cruess (2008), the impact of the media on the relationship of a physician to society (termed a "social contract") can be profound, especially in contemporary society with rapid communication within and between countries. Often doctors and physicians have been portrayed in the media as "self-interested, callous, unfeeling, and running from our societal obligations to care for the ill and poor of society" (Doukas, 2006, p. 44). In Singapore, Dr Susan Lim was reprimanded by the Singapore Medical Council in 2013 for overcharging her patient. This highlighted the ethical limits and "what differentiates them from commerce" (Lim, 2013, p. 157).

During the past few decades, the healthcare landscape has changed dramatically throughout the world. In the words of Coburn (2006), "medicine is also less sociologically prominent now because it is in fact less powerful than it was" (p. 432). Social scientists have speculated that the decline of power is mainly due to the deprofessionalisation and proletarianisation of medicine (Gray, 2002, Hardey, 1999) whereby the patients are less and less dependent on doctors and are self-medicating. According to Timmermans and Oh (2010), the growth of the Internet has led to "facilitating patients' abilities to engage in consumerist practices and equipping them with decision-making leverage during patient-doctor interaction" (p. 97).

Neuberger (2000) posited that mass education, mass media, and mass consumerism are creating and putting a greater demand on the medical profession to meet growing public expectations and doctors are facing "greater demand for information and involvement in health care from a public that is different from that of the past" (p. 6). These channels enable informed consumers to query the medical professionals' knowledge and decisions, and consumers could easily seek alternative treatment compared to the previous era where the consumers were without access to these types of information. This threatens the attribute models' position of being free from lay evaluation and control. Furthermore, as economies grow and population ages, the prevalence of new healthcare issues such as obesity, diabetes and other chronic illnesses are likely to present more challenges to the medical profession (Armstrong, Gillespie, Leeder, Rubin, & Russell, 2007, Boulet and Van Zanten, 2010).

Similarly, the popularity of alternate therapies (Filc, 2006) or complementary and alternative medicine (Broom, 2006) can be seen as a trend towards the loss of the medical profession's power over patients and the reduction of its monopoly over skills (Saks, 2001). Thus, in this era of growing consumerism, there are risks of unhappy and dissatisfied patients not coming back (Teutsch, 2003). This movement has threatened the basic foundation of the attribute model's definition of professionalisation, which states that the practitioner is liberalised from any layman's assessment and control. It might appear that the definition of "profession" in the field of medicine has also seen a shift over time from definitions provided by attribute and process models, towards definitions provided by power and market models, as the public's engagement with the medical profession has shifted.

By the end of the 20th century, there had been an erosion of patient trust and confidence in the medical profession, which "is both a consequence and accelerant for patient consumerism" (Timmermans and Oh, 2010, p. 97). Threats to medicine's professional

autonomy were seen as coming from at least three different directions: from below, from above, and from within (Reich, 2012). From below, it was argued that the dramatic growth of the Internet offers tremendous opportunities for patient healthcare education (Lewiecki et al., 2006) and this influences the way patients interact with their doctors and physicians. From above, doctors' increasing use of more expensive technologies (such as diagnostic medical imaging contributing to the rise in healthcare costs) made them more reliant on those with access to capital (Abbott, 1988, Kuhlmann, 2006). And from within, Saks (2012) and Funck (2012) added that professional's knowledge and expertise were being rationalised under capitalism, hence leading to deprofessionalisation (Saks, 2015).

In addition, the number of doctors receiving compensation as employees within large bureaucratic healthcare organisations is increasing, thereby subjecting them to organisation policies, reducing the degree of autonomy they have in controlling their profession (Funck, 2012, McKinlay and Marceau, 2008), and impacting the clinical decisions they make (Funck, 2012). Harries-Jenkins termed such position as 'ascriptive professionals' whereby the work is determined by the organisation. Unfortunately, with public demand for management intervention to improve the performance of healthcare organisations, there are increasing implementations of "quality assurance methods and standardisation of the processes of treatment", which ultimately leads to the control of medical professionals' work "by people outside the profession" (Funck, 2012, p. 11). Fortunately, this has not affected the medical professional identity because decisions about the technical content of the work pertaining to medicine are still within the realm of doctors (Freidson, 1988). While from within, according to Pickard (2009), a further restratification of the medical profession is taking place, with some doctors taking on managerial and bureaucratic responsibilities for others; new roles are emerging, such as general practitioners with special interests in the United Kingdom; and the balance of power is changing from secondary to primary care, such as the increasing specialisation in primary care.

2.5.2 The legal profession

The legal profession has followed a pathway that is similar to medicine, but with some key differences. Law claims to have demanded the highest standard of conduct from its members, and aims to exemplify the epitome of honour and uphold justice (Shelton, 1901). The profession of law is seen as applying the intellect to provide clients with necessary

information about their rights within the legal system (Baron and Corbin, 2014). However, neither legal intent nor legal practice has always been guided by the same moral compass.

2.5.2.1 The construct of legal identity—a business or a profession?

The practice of law has traditionally been observed as elitist and masculine, a domain of power and prestige (Baron and Corbin, 2014). The image of the legal system is further characterised by the perceived commercialisation of the trade. Ever since the 1900s it has been common in the legal community in the United States, for example, to assume that "law is no longer a learned profession, it has become a business" (Shelton, 1901, p. 275). In Australia, there seems to be a similar increase in the commercialisation of legal practice in recent years: hence questioning the intent of this profession as to whether it is still operating as a profession or becoming a business (Baron and Corbin, 2014). Balmer (1992) also concurred that "it is fashionable these days to decry the transformation of law from a profession into a business" (p. 591). In response, Novarese (2011) argued that it is just the outward cosmetic changes that have made people think of law firms as businesses; however, the mindset of law as a profession largely remains.

Nonetheless, clients in general still see law as a profession and law still attracts many aspiring lawyers. Levine (2005) described the constant and sustained efforts and movements in the early 20th century aimed at upholding an ideal of professionalism in the legal profession. The legislation in Australia worked on improving the image by emphasising that law is a profession whose purpose is to protect the public interest in order to improve society and help citizens maximise their legal rights. This definition goes against the grain of a business objective of maximising commercial opportunities, whereby a client is seen as a means for the lawyers to make money (Baron and Corbin, 2014). Baron and Corbin (2014) noted that numerous senior practitioners, including Chief Justice de Jersey of Queensland (Australia) have denounced the idea of commercialising the legal service.

2.5.2.2 The history of legal professionalisation

As explained by Brundage (1988), modern professional lawyers began to appear in medieval Europe in the mid-12th century. Moreover, according to Ranieri (1989), it is the growth in the professionalisation of the legal workforce that "played an essential role in the differentiation of the legal systems of modern Europe" (p. 181). In her research on the impact of globalisation towards the German legal services market, Shaw (2005) described how the rise

of modern professions, such as lawyers, on the continent of Europe has "generally been associated with the emergence of nation states" and "the late arrival on the scene of a German nation state meant that the process of professionalisation also suffered relative delay" (p. 214). This confirms that the growth of a profession is facilitated by the sovereignty of the state through political empowerment.

Similar to the AMA's Council on Medical Education's establishment of a system of accreditation for the medical profession, the American Bar Association undertook efforts to enhance and improve the quality of American law schools at the beginning of 19th century (Darling-Hammond, 2000). Timmer and Berry (2010), in their article on incorporating legal professionalism syllabus in law education, referred to "efforts … to provide a comprehensive and continual exposure to, teaching about, and submersion in concepts of professionalism that will help law students develop their own professional identities" (p. 1).

The American lawyers' journey towards professionalisation of their contemporary legal profession occurred between the 1870s and the 1950s with the formation of local, state, and national bar associations, through which they pursued regulation and control of the practice of legal services (Abel, 1986). Orol (2012) identified one aspect of the increasing movement towards the professionalisation of American lawyers as "lawyers' necessary interest in legal affairs outside of their home states" (p. 1534). In fact, the professionalisation differences in cross-national legal professions in Western countries have been attributed mainly to variations in basic constitutional structures, regime types, cultures, and legal practices (Abel and Lewis, 1989). The challenge to standardise the practice across the different legal systems makes the practice harder to control and regulate from a central body. In the case of the legal profession, and to a certain extent a number of other professions, regulation is localised within the state's jurisdiction. To practice across different states or countries would require re-licensing in that state or country. Unlike the medical profession, which was able to agree on one governing body to control its practice, the legal profession struggled to do so. It may reflect a lack of united commitment by the individuals in this group, thereby echoing a more fundamental issue in the lack of a single legal identity across different states. In addition, globalisation has triggered specialisation within the profession, making practitioners' expertise quite narrow (Baron and Corbin, 2014).

The Singapore legal system resembles the English legal system as Singapore inherited it during British colonisation. Singapore's court system introduced the prevailing English model in 1826. However, the law could not be applied in full due to the differences in local

culture, custom, religion and legislation application in the rural state of Singapore; for example, the appeal to the Colony to approve "the exclusion of English statutes relating to superstitious uses and mortmain" (Chan, 1986, p. 8). This practice is not unique, and is similar to the legal landscape in Egypt where the court system was a mix of the English legal system and the Islamic-based legal system (Krause, 2001). In Singapore, the law has continued to evolve but remains relatively loyal to the original legal system. Singapore gained independence in 1965, and now has its own legislative body. The legal profession in Singapore distinguishes "practicing lawyers from other legally trained persons who do not practice law but instead work in banks, commercial firms, the Singapore Legal Service, government departments, etcetera" (Chan, 1986, p. 80). In addition, foreign lawyers have limited practice entitlements and these are usually confined to corporate, finance, and banking transactions, unless they have attained the Diploma in Singapore Law (Kennedy 2007). Singapore also adopted a liberalised approach to the legal profession by introducing foreign law practices, where foreign lawyers could practice with respect to offshore transactions (Hsieh 2013). Therefore, the definition and boundaries of the legal profession in Singapore are very well established.

2.5.2.3 Challenges in the legal profession

In his book on the history of the legal profession in England, Abel (2003) discussed the profound challenges to the English legal profession over the past two decades in responding to competing pressures from market and state. Similar to the medical profession's struggles, the issues of professional regulation, deregulation, and reregulation have become a major concern in the legal profession, particularly with a number of high-profile cases of corporate malpractice (Flood, 2011). Examples of such corporate scandals include the failure and closure of Arthur Anderson's legal entity, Anderson Worldwide, in the wake of the Enron Corporation debacle (Parnham, 2002); the overstatement of WorldCom's earnings by $3.8 billion (Salem and Stickel, 2003); and the sentencing of Bernie Madoff to 150 years of imprisonment for a multi-billion dollar fraud (Haines and Beaton-Wells, 2012). In the United States, in light of the general public's dissatisfaction with the legal profession and the enactment of the Sarbanes-Oxley Act of 2002 to avoid future fiascos, corporate lawyers who are employed by corporations are now mandated to uphold the common good and communal values by disclosing a corporate client's unethical practice or conduct (Salem and Stickel

2003). These lawyers are now forced to act in accordance with the code of ethics dictated by their profession, even if they go against their corporate demands.

The emphasis on good professional conduct is not only about following the rules but also being able to make sound professional decisions and act according to the fundamental principles of the profession which are mainly drawn from the individual's moral compass (Baron and Corbin, 2014). The appalling discovery that many law students in Australia did not realise the extent of the discretion and ethical choices that lawyers have in relation to the discharge of their professional obligation has renewed the emphasis on professional conduct and ethics in law schools (Baron and Corbin, 2014).

As in other countries, the establishment of the legal profession in Singapore has not been without its challenges. The Law Society in Singapore is sensitive towards unprofessional behaviour by its members. One of the famous cases pertaining to a lawyer's misconduct happened in 2006 when then-lawyer David Rasif was found guilty of misappropriating $11 million dollars of his clients' money. The Law Society of Singapore officially and openly raised a suit to apply for his name to be struck off the advocates and solicitors list (Peh, 2008). On 18 November 2015, a new regulatory body, the Legal Services Regulatory Authority, was created to oversee legal practices, including licensing foreign law practices and collaborations with local law practices. The purpose of this new system is to ensure the business aspects of legal practice are applied consistently (CNA, 2015). This showed a concerted effort by the association to regulate and control the practice within the profession as posited by the attribute models and the commitment by the individuals of the group to uphold the image.

In Europe, coordination efforts of the European Union, coupled with the fast-growing globalisation of world financial and capital markets have also accelerated professional deregulation and reregulation, thus decreasing nation state control and exposing the legal profession to a competitive environment on a global scale (Shaw, 2005). This is aligned with the notion that the legal profession is closely associated with the political emergence of these nations. Labour market intervention by European Union institutions resulted in professions such as the legal fraternity, in countries that are relatively rich and developed in the present day, having to cope with the free flow of legal professional labour (Neal and Morgan, 2000). In addition, the European Union's 1977 adoption of the Lawyer's Services Directive, the 1992 signing of the United States' North American Free Trade Act (NAFTA), and the 1994 World Trade Organization's General Agreement on Trade and Services laid some important

groundwork for lawyers to practice on a global scale and for the notion of lawyers as one of the many kinds of 'service providers' (Terry, 2008). This was highlighted by Flood (2011) when he wrote that "the size and scope of global law firms has made them difficult to encompass within a single regulatory jurisdiction" (p. 507).

In many ways, the European Union and various worldwide jurisdictions of the legal profession have had quite a profound impact on the process and treatment of professionalisation and the regulation of the legal profession in European nations and even in the United States (Neal and Morgan, 2000, Shaw, 2005, Terry, 2008). Many publications (Evetts, 2011a, Evetts, 2011b, Flood, 2011, Freidson, 2001) indicate that regulation or self-regulation has long been viewed as a core element of professionalism. As rightly described by Davis (2009), "much of the last hundred years of lawyer regulation in the United States has had a significant objective: the preservation and protection of lawyers' monopoly over the provision of legal services" (p. 8).

Similar to other professions, the legal profession is stratified into the following three sectors: private, government, and corporate (Dixon and Seron, 1995). According to Leahey and Hunter (2012), the legal profession "also exemplifies two trends of characteristics of most professions: increasing specialisation and growing income inequality" (p. 1103). Novarese (2011) also noted that "the expansion of the legal profession meant that there was less in common between different branches of legal practice" and the "increased transparency of law firm finances also inevitably led law firms to compete on the basis of profitability" (p. 11). Therefore, as hypothesised by Leahey and Hunter (2012), "lawyers who focus on one or a few practice areas earn more than lawyers who spread their time across a larger number of practice areas and these results hold even when we control for a host of relevant variables" (p. 1121).

In the future, the forces of specialisation, bureaucracy, and competition will probably increase, and further restratification within the legal practice continues to take place as an increasing percentage of lawyers work as salaried employees within large bureaucratic legal organisations (Cramton, 1989). The inevitable globalisation of the legal profession will likely "require lawyers to facilitate transactions and resolve disputes in an environment that spans a wide array of legal systems with vastly different traditions" (p. 2); thus, it poses new challenges to legal ethics and self-regulation of the legal profession (Henderson, 2007).

2.5.3 The nursing profession

Unlike medicine and law, the journey of nursing towards professionalisation has been neither easy nor straightforward. Nursing is complex in nature, requiring the application of knowledge, performance, skills, values, and attitudes (Cowan, Norman, & Coopamah, 2005). Wall (2013) reveals that there are still many unresolved issues pertaining to the recognition, regulation, and funding of nursing practice. Thus, the question about whether or not nursing is a profession is often the subject of lively discussion, and there is continuing disagreement about the answer (Kerfoot, 2012).

2.5.3.1 The construct of nursing identity—a subordinate role

Nursing is a faculty of human science concerned with the study of human beings (Keogh, 1997). According to Rogers (1994), "the practice of nursing is not nursing. Rather it is the use of nursing knowledge for human betterment" (p. 34). On the other hand, Barrett (2002), in her analysis of nursing science, defines "nursing as a basic science and the practice of nursing as the scientific art of using knowledge of unitary human beings who are in mutual process with their environments for the well-being of people" (p. 51). In terms of nursing's association with medicine, Humphreys (2000) refers to nursing as a specialty area "positioned in terms of the relationship between caring and curing" and "is still regarded as being primarily devoted to the tending of the patients" (p. 270). Warne and McAndrew (2004) rightly noted that: "When other health care professionals go home, it is the nurse that continues to provide the care for the patient" (p. 1).

Takase, Kershaw and Burt (2001) asserted that, under the commonly accepted descriptions of a profession, nursing is not a profession. For although nursing practitioners lead the healthcare system in numerical terms, historically they are judged as subordinate to the medical profession despite having attempted to escape this subordination through the acquisition of professional attributes (Beardwood, 1999). Recently, Takase et al. (2001) noted that "the nurses' journey towards professionalisation is constrained by nursing stereotypes in … society" (p. 819) and is mainly due to the "lack of nurses' autonomous practice, their unequal relationships with medical and other health professionals, and allocation of insufficient resources to nursing practice" (p. 825).

Matthews (2012) discussed how "[e]vents, such as war, politics, regulation, legislation, and improved educational practices and settings, heavily influenced the direction

of nursing and its practice. Regulation via licensure was an early major milestone in ensuring public safety and quality of care" (p. 4).

2.5.3.2 The history of nursing professionalisation

The first training school for nurses in the United States was established in 1873. Matthews (2012) and D'Antonio, Connolly, Wall, Whelan, and Fairman (2010) noted that training schools for nurses grew and expanded as many alumnae associations of training schools for nurses began establishing and operating private duty registries. Furthermore, it was "the private registry system, rather than hospitals and health care agencies", that helped shape the practice of nursing in early 20th century United States, and this later "faded as American hospitals assumed full responsibility for nursing the hospitalized sick" (p. 208). In Singapore, the role of the nurse was officially approved in January 1867, with the only female nurse serving various locations to look after the patients (Ministry of Health, 2015). It was not until 1 August 1885 that the nurses' presence was felt when the nuns from a local French convent began to care for the sick in the General Hospital. By 1949, a Nursing Ordinance was established to "regulate the registration, training and professional discipline of nurses" in Singapore (Ministry of Health, 2015, p. 32).

In many countries, nurses represent the largest group of healthcare staff (Almalki, FitzGerald, & Clark, 2011, Lowery, 2011). According to the Institute of Medicine's (Institute of Medicine, 2011) report on the future of nursing in the United States, nursing staff represent eighty per cent of the nation's health care delivery system. In addition, over half of Australia's health workforce are nurses (Armstrong et al., 2007), and nurses represent more than fifty-five per cent of the total health workforce in Saudi Arabia (Ministry of Health, 2008).

2.5.3.3 Challenges in the nursing profession

Nursing practice often lacks autonomy, which is understood as an occupation's ability to control its own work, an essential attribute for an occupation striving for full professional status (Liaschenko and Peter, 2004, Oweis, 2005, Wade, 1999). Professional nursing autonomy in such a context represents "accountability, empowerment and commitment" (Wade, 1999, p. 312) to the nursing profession; or in other words, describes the capability of the nursing profession to independently govern itself and its affairs without the interference of external controls (Polit and Beck, 2004). Liaschenko and Peter (2004) added further that

there are several contributing factors, but the most significant is that "nurses work in complex hierarchies where they are subordinate to the organisational structures, professional agendas, and the culturally endorsed cognitive authority of medicine" (p. 489). As aptly described by Flisbäck and Lund (2015), the competition from other occupational groups and the collective voice within this occupational group would determine the degree of autonomy that this occupational group could attain. As such, nursing would continue to be denied autonomy if they allowed doctors to dictate the care model that nursing must follow. This observation, failing the criteria set by attribute models, was the main reason some authors have rejected nursing's status as a profession (Hugman, 1996, Takase et al., 2001, Warne and McAndrew, 2004).

Local or regional policy, law, legislation, or organisational bureaucracy has impacted "nurses at all levels, so that they have been inhibited from practicing to the fullest extent of their licensure" (Hader, 2010, p. 6). McParland, Scott, Arndt, Dassen, Gasull, et al. (2000) noted that, when nurses believe their autonomy is being challenged or impinged by the bureaucracies of hospitals and healthcare settings, this indirectly places them in an inferior position to administrators, doctors, and physicians; thus, it provides little backing for their nursing practice or professionalisation. Similarly, Carter (1994), in her literature concerning the professionalisation of nursing, stressed that the relationship between doctors and nurses has never been equal and involves unspoken rules of communication inherited from the past:

> [T]there were to be no disagreements; nurses were expected to show respect to doctors (which was reciprocated); and any recommendations, diagnoses or comments were to be made in such a way that it seemed as though the doctor has made them. (p. 368)

Evidence of such an internal struggle is prevalent within the individuals in the nursing community. Even though the role expects them to act autonomously, nurses do not necessarily practice it on the ground. As Stets and Carter (2011) posited, this inconsistency could be due to the difference in the meaning that individual nurses pegged to the identity and others' expectations of them being in that position. They are less able to internalise the desired characteristics because they traditionally hold the subordinate role to doctors. To shed that image would require strong commitments from every individual in the group.

In their study of the challenges within the nursing faculties of tertiary institutions, Emerson and Records (2005) asserted that "the ongoing progression of nursing as a profession is highly dependent upon the acknowledgement of nursing as an academic discipline, imparting the body of knowledge through education and advancing it through

scholarship" (p. 9). Furthermore, the lack of an attributable nursing foundation and areas of scientific knowledge, as articulated by Warne and McAndrew (2004), is one of the many areas that hinder the professionalisation of nursing. As posited by Girard (2005) and Oweis (2005), the greater part of the knowledge that nurses employ in their practice comes from professions other than nursing and "this makes it difficult to identify the uniqueness of nursing, let alone build on specific information from nursing practice" (Girard, 2005, p. 289). The building of niche areas of knowledge can help develop strong and adequate nursing skills that enhance nursing's social relevance and professional status (Iley, 2004). In addition, the nursing faculty cannot demand the respect from others as a profession until there are standards for a consistent body of knowledge (Takase et al., 2001); hence, nursing would not meet the criteria set in power and market models.

Also, within nursing there is a need for a collective voice on matters relating to research that involves nurses supporting and developing the next generation of nurses (Butterworth, 2009). As was justly concluded by Girard (2005) in her editorial on building nursing knowledge, "we need to move forward from where we are as nurses and continue to expand the unique knowledge base of nursing" (p. 290). Kerfoot (2012) added that "lifelong learning is one of the hallmarks of a professional" (p. 39). In Singapore, for instance, the government is backing health care research and development in the pursuit of becoming "a health care hub and a regional leader in research and education" (Arthur, 2008, p. 167).

Still ongoing to some extent, therefore, is the question about nursing as a profession. This has been the subject of much debate and continues to be clouded in controversy, as even now there is no consensus (Kerfoot, 2012). Likewise, Secrest, Norwood, and Keatley (2003) noted that, historically, nurses have found it difficult to define nursing and distinguish it from other healthcare disciplines and no literature has been found that describes what being a nurse means to an individual. Zwerman et al. (2004b) observed that in order to qualify as a profession, "an occupation must attain control and monopoly over the use of the practitioner title" and "it will be impossible to create an occupation that can lay claim to professional status" when anyone can use that designation without regard to training or certification (p. 4).

Therefore, from the attribute model's perspective of professionalisation, nursing is not a profession. Rather, it is classified as semi-professional or an emerging profession, since it has developed only some of the traits, such as academic development and licensing, that are required for an occupation to be considered fully professional (Hugman, 1996, Morris et al., 2006). Yurchenko and Mansurov (2014) added that the members of semi-professions "have

lower status than those in the socially idealized professions" (p. 3). Nonetheless, recent literature on the understanding of power and market models of professionalisation considers the nursing occupation to be "mediated" or "bureau-professions" (Hugman, 1996, Rogowski, 2010), reflecting situations such as the British Government's modernization policy of developing new occupational positions in the delivery of healthcare services within a professional bureaucracy (Currie, Finn, & Martin, 2010). This illustrates how ongoing policy reforms, attempts, and efforts aimed at modernizing and reconfiguring the NHS's clinical workforce in England are able to mediate the increasing size of hospitals and shortages of medical staff to curb rising healthcare costs and to improve the quality of clinical care (Charlton and Andras, 2005, Currie, Finn, & Martin, 2009, Martin, Currie, & Finn, 2009). According to Sim and Radloff (2009), "[r]apid changes in healthcare systems require health practitioners to change practices continually in order to provide quality healthcare" (p. 204).

Apesoa-Varano (2007) described how nursing's "public esteem and legitimacy are at risk if a professional reputation is not secured". She further argued that "nurses risk autonomy if professional socialization and the professionalisation of the occupation at large are not successfully accomplished" and the lack of autonomy means that nurses will "continue to occupy a subordinate position" (p. 270). In the nursing literature there are several definitions of professional socialisation, and according to Dinmohammadi, Peyrovi, and Mehrdad (2013), most of them "describe it as the process of internalizing and developing a professional identity through the acquisition of knowledge, skills, attitudes, beliefs, values, norms, and ethical standards in order to fulfill a professional role" (p. 27). Mooney (2007) concluded that "professional socialization in nursing continues to contribute significantly to the enduring problems faced by newly qualified nurses" (p. 75). Further, a recent study (Brown, Stevens, & Kermode, 2012) revealed the significance of a clinical teacher's role in supporting the development of a nursing student's professional identity.

2.5.4 Significance of professionalisation in medicine, law, and nursing

The next stage of this literature review compares the three knowledge-based and client-centred occupations—medicine, law, and nursing. Table 2.1 is a matrix, with the three professional models on the horizontal row and the three occupations on the vertical column. The table compares the extent to which the medicine, law, and nursing occupations meet the criteria set by the three models.

Law meets all the components of the attribute models, process models, and power and market models. Medicine meets all the components but the attribute model, in which it cannot retain its status as free from lay evaluation. Nursing was unable to meet all the criteria of the attribute models and power and market models: it failed to show autonomy over nursing work; it is frequently subservient to the doctors' role, in which doctors dictate the tasks nurses should perform (Kuhlmann, Allsop, & Saks, 2009); and it does not have a unique body of knowledge.

Table 2.1: Journey to professionalism: medicine, law, and nursing

Occupation	Attribute Models	Process Models	Power and Market Models
Medicine	Partial	Full	Full
Law	Full	Full	Full
Nursing	Partial	Full	Partial

The comparison shows the main differences between medicine, law and nursing occupations. For medicine and law, the groups' strategies and activities were focused on gaining control over the occupations' professional status. This aligns with the acknowledgement that medicine and law are well-established professions (Sim and Radloff, 2009). However, in recent times, the status of the medical profession has been questioned under attribute models because the profession cannot uphold its freedom from being evaluated by the layperson, who can easily obtain medical information from the Internet and challenge the profession's clinical advice. On the other hand, nursing's status as a profession is still unclear and is often subjected to continuous controversy and disagreement (Hugman, 1996, Kerfoot, 2012, Takase et al., 2001).

Articles written on the nursing's journey to professionalism relate to two specific areas: defining the field of operation (Beardwood, 1999, Girard, 2005, Hugman, 1996, Liaschenko and Peter, 2004, Secrest et al., 2003, Takase et al., 2001) and establishing a body of knowledge (Dinmohammadi et al., 2013, Emerson and Records, 2005, Girard, 2005, Newman, 2008, Secrest et al., 2003, Takase et al., 2001, Warne and McAndrew, 2004). In this context, defining the field of operation refers to the process of defining the scope of nursing practice, while establishing a body of knowledge refers to the ability to lay claim to an exclusive body of knowledge that is essential for nursing practice. This development is possibly a consequence of nursing being considered subordinate to medicine (Beardwood,

1999), the lack of nurses' autonomous practice (Liaschenko and Peter, 2004, Takase et al., 2001), the difficulty in defining what nursing is and differentiating it from other healthcare disciplines (Berragan, 1998, Girard, 2005, Secrest et al., 2003), and the lack of an identifiable and consistent scientific knowledge base, all of which hold back the professionalisation of nursing (Takase et al., 2001, Warne and McAndrew, 2004). With a status subservient to medicine, devoid of the required combination of scientific and holistic shared knowledge, lack of autonomy, and an increasing population of ageing nurses, Zakari, Khamis, & Hamadi, (2010) highlighted that: "[a] serious nursing shortage is creating a crisis in health care. Many experienced nurses are leaving the field, and young people are not selecting nursing as a potential career" (pp. 298–299). Somers, Finch, and Birnbaum. (2010) added that: "The worldwide nursing shortage is widely recognised as a serious problem that is at or near crisis levels" (p. 292).

2.5.5 Lessons from the professionalisation of medicine, law and nursing

Numerous conclusions can be drawn from an understanding of the steps undertaken by medicine, law and nursing professions. These motifs are indicators to elements or themes that make up the professionalisation journey of these occupations. In addition, these professions have also faced mounting challenges that are associated with the rapid growth of consumerism and technology, where the engagement model between professionals and clients has also shifted from client-engagement into partnership-collaboration (Brown, 2014).

2.5.5.1 Monopolising the name, access to education and accreditation to practice

It is clear that the journey towards professionalisation for medicine, law, and nursing puts great emphasis on establishing control over the practice through gaining monopoly of the occupation's name and introducing certification, licensing, and control via a single register. It is difficult and often impossible to practice in these professions without completing the required training and education, thus providing an effective monopoly for those who have (Cleary, 2012). Later professions such as pharmacy, accounting and veterinary practitioners clearly demonstrate they have benefitted from such lessons as all now have established university-level training programs for aspiring practitioners, an agreed body of knowledge that is theirs alone, and a managing society to administer entry and discipline the behaviour of members (Birenbaum, 1982, Cooper and Robson, 2006, Jones, 2003, Leonard, 1993). According to Hällgren et al. (2012), "certification and professional accreditations are used as

ways to promote and legitimise a certain area. In professions such as medicine and law, certification has long been mandatory" (p. 472). Although the road to professionalisation is often characterised by much criticism and debate, there is general consensus that the process basically involves two parties: the optimistic profession and the regulative institution that can legislate the monopoly for the provision of services (Macdonald, 1995, Timmons, 2010). The road to professionalisation also includes autonomy and the ability of the occupation to control its own work by clearly delineating the scope of practice. Although Abbott (1988) posited that an occupation's experience in professionalisation does not necessarily depend on each other's journey. Nonetheless, according to Risjord (2011), the perspective on health provided by nurses' roles gives nursing knowledge its identity and unique character.

The formation of local, state, and national associations focused on controlling education and accreditation is also a strategy for enforcing and attaining the status of a licensed occupation. The accountability of certification, licensing, and control has always been a state or national matter (Moran, 2003) and can be very complicated for professions like medicine, due to the many certification and licensing programs offered (Zwerman et al., 2004b), and law, which requires lawyers to facilitate transactions and resolve disputes in an environment that spans a wide array of legal systems with vastly different cultures and traditions (Henderson, 2007).

2.5.5.2 Unique body of knowledge

Laying claim to an exclusive and unique body of knowledge is essential for distinguishing a profession from other occupations. Takase et al. (2001) argued that the nursing faculty could not demand respect from others as a profession until there are standards for a consistent body of knowledge. Likewise, the image of nursing as a non-autonomous practice subordinate to other healthcare professionals might also negatively influence the professionalisation of nursing (Pennbrant, Nilsson, Öhlén, & Rudman, 2013). These suggestions are in line with Larson's (1979) view that an accredited body of knowledge and systematised education are necessary to maintain and control a profession's market share. Similarly, modern knowledge-based economies require other sets of specialised knowledge for dealing with such levels of workplace complexity (Schilirò, 2012).

2.5.5.3 Role of professional education

The role of professional education, and particularly continuing professional education, which includes bringing practising professionals into contact with new forms of knowledge and ideas (Eraut, 1994, Hoic-Bozic, Mornar, & Boticki, 2009, Jackson, 1970), and the role of ethical character development, have become increasingly powerful (Timmer and Berry, 2010). Kerfoot (2012) reiterated that "[l]ifelong learning is one of the hallmarks of a professional" (p. 39). In the United Kingdom, for instance, the government supported the funding of higher education to enable more people to enter into professions through higher education (Spada, 2009). Chong, Sellick, Francis, and Abdullah (2011), in their recent cross-sectional study of Malaysian nurses, further stressed that "continuing professional education is imperative in facilitating the professionalising of nursing" (p. 38) because of the complex and dynamic nature of healthcare delivery, which requires nurses to update their knowledge and skills to keep abreast with changing times.

2.5.5.4 The role of professional associations

Support for continuing education is provided and enhanced through professional associations that provide dynamic and innovative actions when representing the interests of the practitioners and their pursuit of obtaining or maintaining professional status. Matthews (2012) considered professional organisations and associations in nursing to be critical stakeholders that contribute to accountability and represent the voice of the nursing profession to society. Nurses are encouraged to engage in them as a method of promoting unity (Rezaei-Adaryani Salsali, & Mohammadi 2012). Furthermore, the fast-paced and complex healthcare environment requires nursing knowledge, training, and education that is dynamic and open to growth (Clark and Kenaley, 2011, Huston, 2008). Within nursing practice there is also need for a collective voice on matters relating to research that involves nurses, and on supporting and developing the future generation of nurses (Butterworth, 2009).

2.5.5.5 Challenges in new expectations from society

Ironically, Spada (2009) noted that while the importance of professionals has risen in recent years, a number of these professionals have also experienced a decline in public esteem. Even when an occupation has obtained professional status, there may be negative consequences as it is subjected to more and more criticism (McGhee, 1995). Professions and professional

status are not always viewed positively. Doukas (2006) refers to doctors' self-interest as prevailing over their societal obligations. Furthermore, it may be common in the legal community to assume that law has moved away from being a learned profession and there is a "perception that legal professionals exploit their clients and the legal system for financial gain" (Cleary, 2012, p. 10). As Spada (2009) pointed out, "the professions can only exist on the fiduciary principle (to the extent that they inspire public trust in their services), a real or perceived lack of ethical standards should be considered the most serious of threats" (p. 7). Abbott (1988) further emphasised this, comparing the importance of social structure in professionalisation to the actual work that the professions do.

Such negative attitudes displayed to professionals by society as a whole is in part due to the direct opposition towards monopolisation, bureaucratisation, hegemony, and elitism in democratic societies (Cleary, 2012, Picciotto, 2011, Timmermans and Oh, 2010). Freidson (2001) also noted that professionals' monopolisation was seen as advancing their own "selfish economic interest while failing to insure benefit to consumers, that they are inefficient, their work unreliable and unnecessarily costly" (p. 3). However, monopoly over specialised knowledge and the practice of it is unavoidable for skilled workers, as in the case of professionals. These groups spent the time and built the skills through hours of practice, and these should be recognised and compensated through monopolisation of the practice. The real issues raised by society are not about the control of the practice but imposing limits to control, to prevent its abuse. It would take concerted effort by the individuals in the profession to eliminate or minimise any misconduct within the group and help change societal perception.

In the medical profession, for example, the rapid growth of the Internet is decreasing the autonomy of practising physicians by equipping patients with decision-making leverage (Timmermans and Oh, 2010), putting expert advice under even sharper scrutiny (Spada, 2009), contributing to restratification, increasing specialisation in primary care, and forcing some doctors to assume new managerial and bureaucratic responsibilities (Rosenbaum, 2003, Timmermans, 2005). In another scenario, Hill (2000) noted that the advancement of technology and other environmental factors have contributed to the loss in pharmacy's professional status. As a result of this change, pharmaceutical services have expanded and "a critical component of this paradigm shift is a renewed professional role for pharmacists in the process of actively 'caring' for patients" (Hill, 2000, p. 96). Therefore, even after attaining

status, professionalisation in itself is a continuous reinventing of the role in order to keep current and it continues to require commitment from the individuals in this group.

Similar to the medical profession's struggles for supremacy, the issues of professional regulation, deregulation, and reregulation have become a major concern in the legal profession, especially with a number of high-profile cases of corporate malpractice (Flood, 2011). The legal profession is also stratified and beginning to lose status in the hierarchy of professions because of increasing specialisation and growing income inequality; lawyers who specialise tend to earn more money (Leahey and Hunter, 2012). In the United Kingdom, opinion poll data have reflected a decay in public perception of the legal profession with the decline in public satisfaction from 58% in 1999 to 54% in 2004 (as cited in Spada, 2009). The image of its practitioners prioritising monetary reward over the application of their expertise for the good of the public has eroded the basic foundation of professionalism of the legal profession. As well, nursing autonomy is being challenged by the bureaucracies of hospitals and healthcare settings, resulting in inhibited practices, less autonomy, and little backing for nursing professionalisation (Hader, 2010, McParland et al., 2000). In the future, the inevitable forces of specialisation, bureaucracy, competition, and globalisation are likely to increase, posing new tensions and challenges to legal ethics and self-regulation of the legal profession (Henderson, 2007). As economies grow and the population ages, the prevalence of new diseases, infections, and treatments are likely to have greater impact and present more challenges to both the nursing and medical professions (Armstrong et al., 2007, Boulet and Van Zanten, 2010, Clark and Kenaley, 2011, Heitkemper and Bond, 2004). With the profession being the reference group for the occupational identities of its members, the potential impact of such changes on the collective professional identities of the members is quite profound (Lewis, 2014, Shaw, 2005), with professional identities reflecting the profession's image (Mieg, 2008).

The key observations from this review of the road to professional status of medicine, law, and nursing are that professionalisation engages occupations in a variety of different activities and strategies aimed at either obtaining or maintaining their professional status. This implies that the challenging journey of professionalisation requires practitioners and stakeholders to work together to acquire distinct characteristics delineating professions from other occupations. In addition, the road to professionalisation requires substantial investments, resources, time, and effort in order to achieve and maintain a professional stature. These findings are reinforced by Zwerman et al. (2004b), who reported that gaining

the status of a full profession requires that the members of an occupation work together to achieve recognition and gain control over the core characteristics of a full profession. This requires both heavy initial investment and ongoing effort directed at maintaining this professional status.

2.6 The project management journey towards professional identity

The information in this fifth section is derived from the current literature on project management professionalisation activities, the current status of the professionalisation of project management, the arguments for and against the professionalisation of the occupation, and the areas of project management that need to be addressed for professionalisation to be achieved.

According to Zwerman and colleagues (2004a, 2004b), project management, like medicine, law, and nursing, is a knowledge-based occupation. Its journey to professionalisation is thus likely to follow the course of these pioneering occupations towards professional status. Reviewing the struggles, efforts, and achievements of both traditional professions (e.g. medicine and law) and emerging professions (e.g. nursing) to achieve professional status laid the foundation for understanding how others have travelled this path, identified and highlighted valuable key points in this process, and identified the criteria by which professionalism is measured. The analysis of these three client-centred occupations medicine, law, and nursing (Weisberg and Duffin, 1995) should also provide insights into the prospects of professionalising project management.

2.6.1 Understanding project management history

A project is defined as having a definite start and end date to achieve a specific objective that is usually unique at that time. In order to achieve the project objective, the project needs to be managed by following a set of processes that include utilising resources, tools, and techniques (Isik et al., 2009). The practice of project management combines managerial and technical skills by relying on a specialised body of knowledge (Hodgson and Paton, 2016).

Project management is one of the most recent disciplines to strive to complete the professionalisation journey—a very long journey, as its history stretches as far back as ancient Egypt and beyond (Hodgson, 2005). In its modern form, it is an emerging occupation that only in the past decade has sought professional status and identity. According to Morris (1997), project management's history can be reliably traced back as far as the mid-20th

century, with its early expansion in the second half of the 20th century, particularly in the areas related to large-scale projects in civil engineering, aerospace, and defence.

In recent years, project management techniques and methodologies developed within the fields of engineering and construction have been adopted across a range of industries, from information systems and information technology to new media, and in public sector and public–private partnerships (Muzio et al., 2011, Paton et al., 2010). The aim of project management is to start and end a project in the most efficient way, and employ the most suitable and economical resources. Project management processes and principles can be employed in short-term projects such as the implementation of new day surgery booking systems, or in major strategic directions such as improving staff and patient safety or reducing wait times for treatment (Maddalena, 2012).

Currently, project management is thought not to be a technical function, but an organisational methodology that enables various organisations to achieve their development vision through organisational skills that can influence resources and strategic decision-making (Isik et al., 2009). According to Bargaoanu and Dobrescu (2006), this shift from a purely technical function to an organisational strategy "highlights not only the importance of project management as a field of study, but the acknowledgement of project management as a critical component to organizational success" (p. 112). As Isik et al. (2009) pointed out, the strength in project management lies in the tools and techniques employed to run projects, but a successful project is also influenced by organisational factors (e.g. resources, strategic decisions, and relationship with external factors). This co-relation is not surprising, as projects are typically subjected to an organisation structure and jurisdiction. In the same vein, the weaknesses in project management lie in the project manager's ability to utilise the tools and techniques, and in the leverage projects receive from organisational policies (Isik et al., 2009). Therefore, the multifaceted aspects of running a project make the practice of project management important to ensuring a successful outcome.

The advancement of project management over the past 40 years to an occupation with aspirations to professional status corresponds with the importance of project management in different parts of the economy (Muzio et al., 2011). Moreover, project managers who once originated mostly from the engineering and construction sectors now come from various backgrounds including business, social services, health, education, science, information systems/technology, and research (Ekrot et al., 2016, Hodgson, 2005, Todhunter, 2013). Thus, the training fields can be diverse as preparation involves both a body of knowledge

and, more importantly, a methodology. In his analysis of the application of project management principles to organisational strategic planning, Maddalena (2012) stated that the creation of an organization culture that embraces the principles of project management and the need for accountability will surely enhance the understanding of the methodology, provided its successful application contributes to a potential increase in the organisation's rate of success. Statistically, more than thirty per cent of emerging economic activities globally take place as projects and the world's USD 55 trillion gross domestic product was spent on project-based activities (Turner, Anbari, & Bredillet, 2013). These facts have helped propel the importance of managing projects.

Globally, project management is represented by several main national associations or professional bodies, namely the PMI, International Project Management Association (IPMA), and the Association for Project Management (APM) (Hällgren et al., 2012, Muzio et al., 2011). According to Muzio et al. (2011), recent increases in membership and member participation in their professional associations can be traced back to their creation of bodies of knowledge as descriptions of the relevant professional area of competency in the late 1980s to early 1990s. The focus of the Singapore Chapter of the PMI is engaging members through social activities and continuous professional development.

The PMI's 2014 annual report (PMI, 2015c) claimed that project management is a profession that continues to mature through its globally recognised efforts in various areas such as standards, certification and professional development. However the challenge is ongoing for recognition as a stable profession (like law and medicine) in the creation and approval of standards and their adoption for the certification and qualification of individuals (Hällgren et al. 2012). Richardson and colleagues (2015) offered that project management is actually an accidental profession: the incumbents do not intend to be a project manager but happen to be in that position, and many had no formal training prior to taking up the role. Moreover, "project management has grown rapidly in many developing countries" (Bargaoanu and Dobrescu, 2006, p. 112). For instance, the annual number of practitioners in China sitting for PMP certification from PMI increased from 316 in 2000 to 14,720 in 2010, with more expected to sit for certification in the near future (Wang and Shen, 2012).

The PMP certification, developed as the PMI's first credential developed in 1984, recognises the project manager's knowledge in the field of project management. The Institute has introduced further certification in recent years in its effort to distinguish the different levels of competencies further. Program Management Professional (PgMP) certification was

established in 2001 for project managers who manage multiple and complex projects, and Portfolio Management Professional (PfMP) certification, which targets project managers who have advanced experience and skills in coordinated management of one or more portfolios in organisations, was introduced in 2005 (PMI, 2013b).

Turner et al. (2013) posited that there should be a rigorous academic field of study for project management to support the growing demand for global development in this area. He referred to the increase in the past few decades of education programs in project management and the incorporation of project management as a specialised degree at bachelor and masters level in a number of higher learning institutions in the United States; and the development of research in the project management field that began in the past 15 to 20 years in a few universities. There is still, he cautioned, much to be improved in this field in the area of academic education and establishment of proper discipline in higher learning institutions, especially with the growing interest in applying academic rigour.

Evidence from the United States suggests project managers there are keen to have the occupation officially recognised as a profession, yet have still to reach their goal (Turner, 1999, Zwerman et al., 2004a). There are two significant challenges contributing to this delay (Zwerman et al. 2004a). The first is "the lack of coherent required educational programs and the development of the associated body of knowledge and research activities required for a successful claim to professional status". The second is the "lack of control of the name" (p. 7), which must be captured and controlled before an occupation can lay claim to professional status. In his paper on future practitioners of project management, Todhunter (2013) identified the changing nature of projects due to social and economic pressures and described how fast-changing technological advancement "will place greater demands on higher education to provide appropriate teaching and learning environments to cater for the needs of our future project managers" (p. 54).

2.6.2 Challenges in project management

Thomas and Zwerman (2011) identified a major challenge for project management:

> To date, no government has recognised the imperative to protect the public from the malpractice of individuals calling themselves project managers, even in the face of billion-dollar overruns on public projects. It is unlikely that governments will independently pursue actions to create a project management profession (p. 272).

This is despite the efforts in South Africa, where the government gave a direct challenge in 1997 to the Project Management South Africa association to assist the government and the country in developing effective project personnel, practices and results (PMSA, 2015). However, it would appear that this intervention by the South African Government had little impact on the global environment.

2.6.2.1 Accreditation

For project management to qualify as a profession, it will require the combined efforts of its members and professional associations (Zwerman et al., 2004b). In established professions such as medicine and law, certification has been proven necessary for its members to practice the trade (Hällgren et al., 2012); however, in project management practice today in the United States, certification is not mandatory (Thomas and Zwerman, 2011).

According to Morris et al. (2006), there are now attempts in the United States to generate certification that will act as barriers to entry and promote the value of project management practitioners. Currently, some form of certification is the only means of reflecting a person's knowledge in project management methodology. That said, it does not attest that the holder is skilled in performing project management work. Nonetheless, organisations can use such certification to assess whether or not the candidate has the right knowledge before they assess the candidate's ability through actual performance evaluation. Through this process of appraising the project manager's capability and associating it with the certification, organisations can gauge the efficacy of project management certification. If the certificate holders prove to perform consistently well compared to those without certificates, more and more organisations would want to insist on project managers having that certificate, hence creating a demand for project managers to get themselves certified. In addition, the collective requirement from organisations for project managers to be certified would also create a form of regulation in the project management profession without having to rely on the government or state to enforce standards through legal authorisation. This is the basis of power and market models that could inadvertently officiate the project management regulation.

Yet, in order to create the demand for certification through this avenue, there must be concerted effort from the association and individual members. The certification process must be stringent enough to provide effective evaluation of the project manager's knowledge while not being too difficult and turning away project managers from taking up this certification.

The individual members who are certified should prove themselves to the organisations by performing well and maintaining the good image of the certificate. In the context of this research, as a foundation to the research interview questions, it is necessary to address the regulation, certification, and licensing of project management practice.

2.6.2.2 Diversity in project management domains

Substantial variability in project management practices has been noted in different types of projects (Besner and Hobbs, 2008, Payne and Turner, 1999) For example, IT projects have certain distinctive characteristics. They are perceived as highly challenging and complex (Altahtooh and Emsley, 2014, Whitney and Daniels, 2013), and dynamic. The task process is varied and unpredictable, and tasks are often unclear and urgent (Hahn et al., 2012). A high degree of risk is coupled with rapid changes in technologies and business processes, which cause unpredictable fluctuations in cost (Brandas et al., 2012, Schwalbe, 2010). One key reason why project management practice has found it difficult to standardise and achieve professional status has been the lack of homogeneity between practice across different industries. The diversity in project management practice in different industries adds challenge to developing a standard body of knowledge that is applicable to all industries (Bresnen, 2016).

A major concern as well as a deterrent to professional status is the lack of a clear, unanimous definition of what a project management practice should be, and consensus on its scope. Thomas and Zwerman (2011) phrased it thus:

> What projects will professional project managers assume as theirs? And what will be left to anyone else who wants them? Where does the casual practitioner fit into the world of projects and where does the professional project manager enter? (pp. 268–269).

There is "a long debate in the management education community as to whether project management is a practice or an academic discipline" (Kwak and Anbari, 2009, p. 435); "different opinions about the nature of project management abound in the literature" (Crawford, Pollack, & England, 2006b, p. 178). According to Paton et al. (2010), "often this lack of autonomy and power [is] seen to stem from a lack of recognition for project management among senior management" (p. 163). Comments such as these seem to suggest that until there is consensus on what is in and out of the scope of the project management practitioner's role, it will be an uphill task to develop the kind of standards and guidelines that will make project management an enforceable profession (Zwerman et al., 2004b).

Key elements of this research will therefore include interview questions that will enhance understanding of the definition of professional identity that distinguishes project management practice from other occupational groups and the scope or field of operation for the project management practice.

2.6.2.3 Body of knowledge

In 1976, the emergence of agreement in the United States about what constitutes PMI's Project Management Body of Knowledge (PMBoK) can be seen as a huge stride in the right direction, as it will invariably influence industry views on areas such as competence, best practice, and training and development (Jugdev, 2008, Morris et al., 2006, Thomas and Zwerman, 2011). The claim for exclusivity over the body of knowledge is an attempt to legitimise monopolisation or exclusive control for the profession, and the use of one globally accepted body of knowledge. The PMBoK aims to provide the technical approach to managing projects and the numerous subsequent revisions have retained the same structure (Jugdev, 2008).

However, according to Buckle and Thomas (2003), the softer and more intuitive approaches to human activities are still lacking in the PMBoK, which currently focuses on linear, rational, and analytical approaches to the world. Hodgson (2005) pointed out that "major discrepancies in the body of knowledge continue to drive a wedge between the European and United States project management professional associations" (p. 56). For example, the PMBoK, which is used mainly in the United States, guides the project manager in the areas of project management processes and operations, whereas the Projects in Controlled Environments (PRINCE2), which is used mainly in European countries, advises project managers on optimising project performance. Stretton (2011) explained that this is because "each main professional association has a vested interest in maintaining its own body of knowledge, as each case has involved such a big investment in, and commitment to, subsequent certification process" (p. 21). He also argued that it is difficult to envisage "any situation that might prompt professional associations to voluntarily cooperate to develop a global body of knowledge to which they would commit themselves" (p. 22). Besides the lack of unified agreement on a standardised body of knowledge, the existing bodies of knowledge are also deprived of an important component—a theoretical foundation (Engwall, 2003, Jugdev, 2008). This inability to develop a body of knowledge that is sufficiently accepted and valued as a means for project management practice is perhaps one of the main reasons why

project management still struggles globally for occupational control and is regarded as a "weakly-institutionalized occupational field" (Hodgson and Paton, 2016, p. 353). Thus, it will require the combined efforts of its practitioners and professional associations to develop a well-defined and comprehensive body of knowledge that can be employed by the profession, and to create essential values for project management practice (Thomas and Zwerman, 2011). It begs the question to what extent there could be unity between the project management groups across the different industries and continents, and to achieve it requires effort by the individuals in this occupation.

As one example, for software development projects, often a wide range of methodologies are needed depending on project size, system criticality, and project priorities (Brandas et al., 2012, Cicmil, Williams, Thomas, & Hodgson, 2006). In addition, "many projects push into unexplored areas where neither the extent of the complexity nor the potential range of solutions, is apparent going into the project" (Dearstyne, 2012, pp. 31–32). Furthermore, trends such as increased competition, shorter product and service life cycles, tighter budgets, increasingly uncertain and complex environments, and globally dispersed and multicultural project teams are making the practice of project management tougher and more difficult to manage (Hall, 2012, Thomas and Mengel, 2008). Thus, one of the key deliverables from this research study is ascertaining the level of practitioner concern in having a standardised framework for project management to address all these challenges as a group.

2.6.2.4 Project management education and accreditation

Occupational researchers (Emerson and Records, 2005, Eraut, 1994, Gallagher and Bailey, 2000, Newman, 2008, Pant and Baroudi, 2008, Timmer and Berry, 2010) already agree that the field of education is of utmost importance when discussing the qualification that makes a profession. Brint (2001) emphasised the importance of university education in producing knowledge worker professionals such as project managers. Unfortunately, because project management is a cross-discipline profession it may be difficult to locate it within a single faculty of a specialised training and education institution (Bargaoanu and Dobrescu, 2006, Cicmil et al., 2006). Similarly, Thomas and Mengel (2008) noted that current levels of education fail to prepare project management students to deal with the increasing complexity in today's broader organisational context. They went on to conclude that "clearly, there appears to be a gap between what education providers are offering and what is needed to deal

with projects in today's environment" (p. 307). In addition, Söderlund and Maylor (2012) suggested that "more time and effort should be put into the soft side of project management" (p. 690). The development of an accredited academic discipline with an associated set of research areas is then critical for the success of the project management professionalisation journey, and much work is required to integrate them into various specialised short courses in project management (Thomas and Zwerman, 2011, Zwerman et al., 2004b).

According to Thomas and Zwerman (2011), the major challenge facing efforts towards project management professionalisation is "gaining recognition and acceptance of the changes required of both professional associations and practitioners" (p. 272). For instance, the professional project management associations could contemplate pursuing the required licensing from the government or state to enforce the standards that are necessary in traditional professionalisation (Morris et al., 2006). In addition, with the "PMI's long-term commitment to the professionalisation of project management" (Stretton, 2011, p. 16), the professional associations (such as PMI) should consider promoting professional development for project management practitioners and enhancing certification, research, and networking opportunities to help project managers advance their careers (Lombardi, 2005).

On the other hand, project management practitioners "need to decide whether they see project management as a profession that should be self-regulating and to which they are willing to submit their practice for judgment, or whether they would rather see it continue as an occupation" that is subject to market demands or corporate priorities, strategies, and structures (Thomas and Zwerman, 2011, p. 272). Professionalisation also creates some liabilities, such as additional costs of insurance and personal liability, as evidenced by malpractice costs of high-profile corporate scandals like Enron; costs necessary for practitioners to maintain a current understanding of the body of knowledge and to continually update and upgrade their skills; and higher costs for projects and organisations requiring the services of professional project management practice (Alam et al., 2008, Thomas and Zwerman, 2011).

The added challenge in Singapore is the required government endorsement to legitimise self-regulation within a professional association. The so-called "regulative bargain" (Cooper, Lowe, Puxty, Robson, & Willmott, 1988) with the state is difficult in Singapore because, at this point, there has been no clear indication of the criteria to pass the Bill. As mentioned in the earlier sections, regulations for professionals in the medical and legal industries were established with the liberation of Singapore from Malaysia. The

Singapore Society of Accountants was inaugurated in 1963, around the same period, to register and regulate the conduct of all accountants (Institute of Singapore Chartered Accountants, 2015). In 1970, the Government passed an Act to establish a professional engineering board to "make provision for the registration of professional engineers" (*Republic of Singapore Government Gazette Acts Supplement*, 1970). Based on the professionalisation models, the formation of regulatory bodies for these professions is not unexpected.

However, the education criteria for professional status required by the attribute and process models were ruled out with the implementation of regulatory bodies for occupations such as insurance agents and real estate agents. In 2007, there were reports of rampant unethical behaviour by real estate agents (AsiaOne, 2007). Despite attempts to register real estate agents and encouragements to use registered agents, the screening and enforcement of ethical practices was a challenge and there were consumers calls for better regulation of the industry (Toh, 2007). As a result, the Ministry of National Development set up the Council for Estate Agencies in 2010 to regulate the practice of real estate (CEA, 2013, Ministry of National Development , 2010). The criterion for registration as a real estate agent is at least four passes in the General Certificate of Education at Ordinary Level (or equivalent) and a pass in the real estate licensing examination. There were no requirements for the occupation to be full-time or for higher level education. Therefore, based on this mandate by the Singapore Government, it clearly showed that the impetus for the government to enforce regulation of a practice is whether or not the alternative would impact the society negatively. This phenomenon was also observed in England, where not all learned occupations became professions. As indicated by Saks (2012), where the comparison between herbalism and acupuncture in England showed that:

> the herbalists alone have been earmarked by government to gain legal closure through statutory regulation given a perceived need for greater public protection in this area—despite having equivalent knowledge and expertise and arguably less rigorous and unified occupational organisational structures to those of the acupuncturists (p. 5).

To sum it up, the resulting review of current literature on project management professionalisation activities helps build an understanding of the current status of its professionalisation at disparate stages geographically, with corresponding challenges, and arguments for and against the case to qualify as a profession in Singapore. As Thomas and Zwerman (2011) stated, this professionalisation journey will require the combined efforts of

key players in this process, which includes academics, researchers, consultants, professional associations, organisations, and project managers, and may result in both gains and losses to these group of participants. In addition, this research identifies essential areas that need to be addressed and provides insights for the advancement of the project management practice towards professional status. These areas are examined further in the next section.

2.7 Present research study: Gaps and justifications

The information in this sixth section identifies the gaps in the present research study. These gaps will be the basis for the research questions, which will be addressed by gathering (Chapter 3) and analysing (Chapter 4 and Chapter 5) data.

2.7.1 The construct of project management identity

The literature review has shown that it is essential to first gain an understanding of the scope and tenuous probability of success of the journey towards professionalisation of an occupation before engaging in the activity. Understanding the sociology of a profession may help to distinguish between professions and non-professions (i.e. occupations) and to explain how professional identity, which represents the profession's image and to which aspiring individuals might identify, is strongly shaped by the professionalisation process (Mieg, 2008).

Perhaps the most challenging period for members of these emerging professions is the stage of crafting what they mean by professionalisation for their speciality. This is the stage at which members are discovering the rules of engagement among themselves and between them and society at large. This is also the phase where they are discovering what is required of them individually to implement the change. The transition from occupational identity to professional identity requires transitioning from one role to another, either through adapting their existing role or adopting a new one. They not only have to think and act collectively as a group, but also undergo internal adjustment to their new role. At this point, there may be chaos and conflicting ideas on how the emerging professionals should portray themselves within their societal context. There may be multiple confirmations and reaffirmations of the acceptable characteristics of the profession to which the group aspires, and choices about where they should position themselves in the community. Burke and Reitzes (1981) suggested that individuals need to internalise the role and that includes not only attaining the

required skills and behaviour, but also aligning themselves with the development of the role and the expectations of others in their group.

To ensure that they are ready to act out the new professional identity that their group prescribes, individuals may also need to resolve any conflict between the profession's expectations of them and their own. If the members are not aligned with the desired outcome, the group may lose the momentum to propel itself forward and fail to cement its professional identity. To increase the chance of success, the practitioners must subscribe to the ideology of being professional and demonstrate the drive to get there. They will need to conform to the new role through consistent affirmation and reinforcement.

Of particular interest to this research are questions of whether and to what extent there is a shared vision of gaining professional identity among the practitioners; what they believe it means to be a profession in the field of project management; how the project manager's professional identity is shaped by the increasing demand and complexity in today's projects (Lavy and Yadin, 2013, Maylor et al., 2013); and members' commitment to driving the necessary changes in gaining monopoly over the use of a name, defining the field of operations, establishing a body of knowledge, controlling education and accreditation, introducing certification, licensing and control, and making changes to the professional association (Zwerman et al., 2004a, Zwerman et al., 2004b).

2.7.2 Project management academic education

Although much has been written in the literature about the importance of project management to industry (Chipulu et al., 2013, Lloyd-Walker et al., 2013, Maddalena, 2012) and project management as a cross-discipline practice that requires specialised training and education (Bargaoanu and Dobrescu, 2006, Cicmil et al., 2006), there are still no universally similar and formally recognised course requirements such as those in place for medicine or law (Cleary, 2012). Project management courses currently available in Singapore's higher learning institutions are offered as a master's degree in the School of Design and Environment (National University of Singapore) and School of Mechanical and Aerospace Engineering (Nanyang Technological University). Unlike medicine and law, which have their own faculties, there is no specific faculty for project management. Therefore the path to project management education is initially through the specialisation of various disciplines offered by other faculties, which does not meet Hill's (2000) recommendation that: "professionalisation, or the development of professionalism, must begin at the earliest stage of professional

education" (p. 97). Similarly, despite the changing nature of the workplace environment and organisations' increasing reliance on project-based work (Dearstyne, 2012), project management is notably absent in sociological studies of professions (Bargaoanu and Dobrescu, 2006, Zwerman et al., 2004b). In their analysis of project managers in China, Wang and Shen (2012) concluded that project management practitioners with more work experience and formal training are significantly more committed to their project management profession. They suggested that professional training and project work experience can help to inculcate and reinforce project managers' skills, values and beliefs, "which will help to establish their professional identity and commitment" (p. 158).

2.7.3 Project management scope of practice

With the progress in projectification, also known as project-based activities, in the business world (Hanisch and Wald, 2011), and the transformation of traditional organisations into project-based organisations (Packendorff and Lindgren, 2014), it is common to find the application of project management and projects to any kind of tasks in any kind of environment (Cicmil, Hodgson, Lindgren, & Packendorff, 2009) and spanning beyond the traditional hierarchical lines of authority (Hanisch and Wald, 2011). According to Packendorff and Lindgren (2014), projectification is the "development towards the use of projects for handling complex tasks and creative renewal in contemporary organizations" (p. 8). Its development has been increasingly more prominent in the past few decades (Packendorff and Lindgren, 2014) with organisational support through recognition of formal project management titles such as 'project manager' and 'program manager'. In Singapore, the rise in the number of projects is evidenced by the continued hiring of project-related roles in government institutions (Kelly, 2015). According to Robert Walters' (2016) report, the demand for project managers was high in 2015 with annual salaries within the attractive range of SGD 80,000 – 200,000 and it continues to look promising. To some extent, this leads to project management being viewed as a methodology, and weakens the claim of any exclusive body of knowledge. To strengthen the claim of project management as a field of study would involve capturing an exclusive body of knowledge, but this remains elusive when it does not come under the jurisdiction of any faculty within a tertiary institution (Bargaoanu and Dobrescu, 2006). This has led many project management practitioners to consider undergoing a formal process of professionalisation that is driven globally by their

professional association, representing the interests of project management and project managers (Paton et al., 2013).

Prominent in the literature are trends such as increased competition, complex applications (Hall, 2012), changing societal values (Crawford et al., 2006a) and widespread recognition of the variability of project management (Besner and Hobbs, 2008). These are making the practice of project management more difficult to manage. As business and workplace environments have become even more complex and competitive, many researchers (e.g. Alam et al., 2010, Beukers, 2011, Pant and Baroudi, 2008, Söderlund and Maylor, 2012) have called for expanded effort in training and education. In addition, a focus on the softer side of project management would assist project managers both in addressing the complexities of real projects, which are often characterised by chaos, uncertainty, and changing requirements (Thomas and Mengel, 2008, Viaene and Van den Bunder, 2011), and in articulating and communicating project outcomes to meet the needs of disparate project stakeholders (Todhunter, 2013).

Furthermore, the different project management practices utilised by various disciplines (e.g. construction and IT) make it difficult to standardise the body of knowledge. Harmonising the heterogeneous groups within project management practice may well become one of the key factors in professionalising this occupation. Gilkey, Garcia, and Rush (2011) have suggested that internal resistance may contribute to the incomplete professionalisation of an occupation. Moreover, there is growing realisation that project management, in line with most new knowledge-based professions, is an organisationally bound practice (Muzio et al., 2011, Paton et al., 2013), which suggests a lesser degree of autonomy on the part of project management as a profession. This will certainly add complexity to the already changing journey towards professionalisation. In addition, the personal perspective of the members of these occupations has not been fully explored in existing literature. Their motivation as individuals and as a group is critical in navigating their way towards attaining professional status. As posited by Maister (1997), professionalism is about projecting one's attitude.

2.7.4 Motivation to attain project management professional identity

The study of professionalisation covers mainly the development of the professional group (i.e. an occupation) into a profession. Most of the literature examines the interaction between the professional group and its surrounding society in the form of, for example, social

engagement through licensing and regulations, and uses predominantly attribute models, followed by process models or power and market models. Most of the literature also assumes that the members of these professional groups are aligned in their determination to gain professional status. However, there has been minimal investigation of the individual's struggle through this journey and the extent to which they are willing participants or active in promoting their occupation to professional status. One of the closest to this perspective was the study by Secrest et al. (2003) of nursing students and their feeling of affiliation with the profession. Another study was by Roosipõld and Loogma (2014), who explored Estonian chefs' understanding and interpretation of the changes to their occupations, and their perspective on professionalisation. They concluded that chefs do not fit into the traditional definition of a profession because of the weak higher education requirements and the lack of theoretical knowledge, among other shortcomings. Nonetheless, the study reaffirms the authors' impression that chefs fall into a hybrid professionalism sharing selective features of traditional professional criteria. However, the concept of hybrid professionalism will not be considered in this study as it falls closer to the vocational spectrum of occupations than the scope of professions.

External entities, namely the professional group and the broader society, are important stakeholders in the professionalisation of any occupation. Equally, if not more important, are the individuals who need to effect the changes in order for the group to attain the professional recognition. As Maister (1997) indicated, individual attitude helps bring about change for the group. There are also numerous testimonies of the impact of individual members' behaviour on the professional image and myriads of corroborative cases where rogue individuals of these professions have contributed to the decline in the profession's image and public trust in the group as a whole.

In the case of medicine, the impetus for doctors to move towards instituting the medical profession was the proliferation of unqualified practitioners who tainted the profession's image and harmed its integrity. By contrast, nurses did not have a great enough inducement for the occupation to change its subordinate image drastically; hence, their claim to professional status remains questionable. As a group, nurses have progressed in the areas of licensing, regulation, and education; however, many individual nurses still lack the confidence to push for autonomy in their work. Currently, there is little attempt to study this anomaly, although it is strongly acknowledged (Apesoa-Varano, 2007, Carter, 1994,

Liaschenko and Peter, 2004, Oweis, 2005, Takase et al., 2001, Wade, 1999) that a strong push from within is essential for the move to professional status to succeed.

This research seeks to gather information about the strength of the conviction to push for professional status held by project management practitioners in Singapore. Without such motivation and without a dedicated tertiary faculty, there may be little likelihood of immediate success. If motivation were strong, in time, it would have a greater chance of succeeding. Nonetheless, belief in the legitimacy of the process and commitment to its achievement is the first step, and the first step in the investigation is to gather information about this strength in order to estimate the nature of the barriers and provide some guidance about how best to proceed. In addition, the increasing need for project managers in Singapore due to the rising number of projects to be implemented makes this location an ideal site for this study.

2.8 Key points and specification of the research question

Although there is evidence that professional organisations such as PMI and APM (Paton et al., 2013) recognise these dilemmas of project management professionalisation, uncertainty remains about the nature and strength of aspirations among the practitioners themselves. This gap, identified in the literature review, will form the basis of this investigation. The investigation will address two research questions:

Research Question 1: How do project managers conceptualise being a professional in their working role and what criteria do they use?

Research Question 2: What is the strength of project managers' motivation to commit to the process to achieve a stronger professional status?

Each of these questions is examined further below.

2.8.1 Research Question 1

How do project managers conceptualise being a professional in their working role and what criteria do they use?

To date, there is a lack of research on how or to what extent project managers are keen to attain professional recognition. Are practitioners willing and eager to accept project management as a profession that should be self-regulating? Or do they prefer it to continue as an occupation that is subjected to market demands or is directed by the bureaucracies of corporations? In addition, in order to better understand the scope of project management

practice, practitioners' views on the need to attain professional status, and the professionalisation journey ahead, it is necessary to examine how project managers perceive or define achieving professional status or what being a professional means.

2.8.2 Research Question 2

What is the strength of project managers' motivation to commit to the process to achieve a stronger professional status?

An occupation's transition to professional status consists of engaging in various activities and strategies aimed at obtaining or maintaining the characteristics of a profession. For instance, to what extent are project managers prepared to participate in the activities that would improve the chances of gaining professional status? What else is required of the individual project managers to commit to this journey? And what steps have yet to be undertaken to promote project management professionalisation?

2.9 Chapter summary

Chapter 2 reviewed the literature that underpins this phenomenological qualitative study. It identified important aspects of professionalisation such as attributes, processes, and governance, identified gaps in the research, and led to the formulation of the research questions about how project managers understand their professional identity and the extent of their motivation to commit to the process to achieve it. These research questions address the purpose of this study, which is to ascertain whether or not project managers understand what is required from them in this journey, their confidence in achieving it, and how dedicated they are into ensuring a successful outcome.

The next chapter will explain how the methodology was developed to answer the research questions. Because these questions are designed to gain information about project managers' perception and commitment, they will be underpinned by a qualitative methodological approach.

3 RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This research will adopt a qualitative approach to explore the lived experiences of individuals of an occupation, anticipating that occupation's evolution into a profession. The aim is to ascertain whether or not project managers have a shared understanding of what is required from them in their progress towards professionalisation, their confidence in achieving a successful outcome, and how committed they are to the journey.

In this chapter, the design of this study is described in detail. This will cover issues such as the appropriateness of the research method and provide information on the population, sampling, data collection, data analysis, reliability and validity, limitations and challenges, and ethical considerations of the research study.

3.2 Rationale for research approach

To reach any decision on the appropriate method to answer a research question depends on the purpose of the research. Any choice between a qualitative or quantitative approach to research design lies in the intent of the research. The distinction between a qualitative and quantitative approach is whether the research is objective/positivist, constructivist, or subjective research (Oh, 2015). While it is possible to apply both methods to a study, Oh (2015) suggested that it would create a paradox to analyse the results from both objective (quantitative) and non-objective (qualitative) perspectives.

This study is exploratory in nature and thus a qualitative design is most suited to it. The general and broad nature of the research questions require that the research areas be investigated in detail, for which both descriptive and detailed data need to be gathered (Creswell, 2009, Creswell, 2012). Because the research seeks to gain information about the participants' perceptions and experiences, it would align more closely with a qualitative approach, which would facilitate striving "to uncover the understanding that already exists in people's experience" (Smythe and Giddings, 2007, p. 38). Such an approach is useful for developing adetailed understanding of complicated phenomena, and for studying smaller groups. According to *The Sage Dictionary of Qualitative Inquiry* (Schwandt, 2007), "Qualitative inquiry deals with human lived experience. It is the *lifeworld* as it is lived, felt,

undergone, made sense of, and accomplished by human beings that is the object of study" (p. 100).

Qualitative researchers are concerned with "things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meaning people bring to them" (Denzin and Lincoln, 2011, p. 3). According to Polkinghorne (2005), the primary purpose of qualitative research is to describe and clarify experience as it is lived and constituted in awareness. Because human experience is complex, qualitative research methods need to be epistemologically attuned to the special characteristics of human experience and to facilitate the investigation of experience. Thus, qualitative research methods will involve the systematic gathering of data from talk or observation, and will be used in the interpretation of social phenomena as experienced by individuals themselves, in their natural context (Denzin and Lincoln, 2013). Qualitative research methods are often applied when a study seeks to understand "the rich, complex and idiosyncratic nature of human phenomena" (Cavana, Delahaye, & Sekeran, 2001, p. 12).

A qualitative research design is therefore appropriate to this study, because the method allows for (a) purposeful selection of participants (Creswell, 2012); (b) the collection of in-depth responses to explain the participants' "experiences in a humanistic, interactive approach" (Jackson, Drummond, & Camara, 2007, p. 21); and (c) the use of broad general questions (Creswell, 2012) that allows the candidate to gather the rich responses of participants until the point of saturation (Bowen, 2008).

There are many commonly used qualitative methodologies, including phenomenology, case study, and ethnography (Petty et al., 2012); however, the focus of this research is the need to know more about the individual project managers' experiences. Thus, the focus of this research aligns with the primary purpose of phenomenological approach, namely, "the study of experience from the perspective of the individual", and its "… [particular effectiveness] at bringing to the fore the experiences and perceptions of individuals" (Lester, 1999, p. 1) through their own personal lens. Case studies described by Yin (2013) follow a more positivist epistemology and is often used to understand what is distinctive within a bounded system (Creswell, 2012), whereas ethnography is more suited to examining shared patterns of behaviour, beliefs, and language within a cultural group, drawing the researcher into the world that is being studied (Goulding, 2005), often through participant observation (Petty et al., 2012).

Wertz (2005) detailed that the rise of a phenomenological perspective, led by Giorgi and the Duquesne Circle in the 1970s, is comprised of two broad traditions; namely, the descriptive approach and the interpretive approach (Cohen and Omery, 1994). According to Finlay (2008), Giorgi developed the "descriptive empirical phenomenology inspired by Husserlian ideas" (p. 3) with the aim of understanding the essential structures or essences of phenomena as they appear in consciousness. To derive the essence of a phenomenon using Giorgian descriptive phenomenology, researchers need to put aside prior knowledge of the phenomenon (referred to as bracketing) in order to enhance their understanding (Flood, 2010, Petty et al., 2012). In contrast, the Heideggerian interpretive phenomenology "suggested that rather than focus on people or phenomena, the exploration of lived experience should be the main focus" (Flood, 2010, p. 9).

The interpretive phenomenological approach has gained the acceptance with of American researchers (Caelli, 2000, Denscombe, 2010, Dowling, 2007). According to Denscombe (2010), such North American versions of phenomenology are commonly linked to the areas of sociology, psychology, education, business studies, and health studies, and place emphasis on "the ways people interpret social phenomena". Such a focus originates from the 'social phenomenology' of Alfred Schutz (1962, 1967), which is "less concerned with revealing the essence of experience, and more concerned with describing the ways in which humans give meaning to their experiences" (p. 101). In this manner an interpretative phenomenological methodology describes a two-stage interpretation process or exercise with the participants, in which the researcher tries to make sense of their world and to make sense of the participants trying to make sense of their world (Smith and Osborn, 2008). In doing so, the researcher determines the underlying structure of an experience by interpreting the originally given descriptions of the situation in which the experience occurs (Moustakas, 1994) and an individual interview is often the main method or strategy of data collection (Flood, 2010, Groenewald, 2004, Petty et al., 2012).

According to DiCicco-Bloom and Crabtree (2006), an individual interview "allows the interviewer to delve deeply into social and personal matters", whereas a focus group approach "allows interviewers to get a wider range of experience, but because of the public nature of the process, prevents delving as deeply into the individual" (p. 315). In addition, focus group techniques "can silence individual voices of dissent" (McLafferty, 2004, p. 188) and are deemed not suitable for researching into sensitive topics that individuals might be reluctant to discuss in public (Qu and Dumay, 2011).

Talk is prioritised, as language enables comprehension of the importance that an individual participant attributes to his or her experience of the world (Jurema et al., 2006) and the individual perceptual data "is a narrative account by the participant of his or her knowledge and experiences related to the topic of study" (Lopez and Willis, 2004, p. 727). This sentiment is echoed by Ivey (2013), who reiterated that when researchers have participants speaking about their experiences, "the individual's exact words and expressions are the focus of data collection" and the value of this interpretive phenomenology approach "is that it gives insight into an experience that is not understood, occurs rarely or in a widely scattered population, or the descriptions available seem to have little in common" (p. 27).

In this study, an interpretive phenomenology research design is preferred because this study involves an in-depth exploration of participant experience and interpretation. In addition, the researcher needs to delve deeply into sensitive social and personal matters to deepen understanding of participants' lived experiences, despite not being part of the phenomenon that is under study. For these reasons, interpretive phenomenology approach was chosen, together with the use of individual interviews as the data collection technique. The significance of this approach is that it enhances the knowledge gathered on project managers' understanding of what is required from them in their quest towards professionalisation, their confidence in achieving a positive outcome, and how committed they are to the journey.

3.3 Target population/context

The research study will target project managers who are members of the PMI Singapore Chapter, which was formally established 1 April 1999. Currently there are 2005 members registered with PMI as Singapore Chapter members. Unfortunately, there is no publicly available information about the overall breakdown of membership by specialisation (PMI, 2016a).

Owing to the candidate's personal association with the management of PMI Singapore, the research participants were approached through the PMI Singapore Chapter (see Appendix 1). Furthermore, the candidate's personal relationship with the president of the PMI Singapore Chapter increased the chances of the organisation agreeing to the study.

3.4 Research sample and data sources

3.4.1 Sampling procedures

A purposive sampling technique was utilised for this study, as the primary objective was to select a predefined group of participants (Trochim, 2006) based on their likelihood of being able to provide answers to the research questions (Teddlie and Yu, 2007). The logic and strength of purposive sampling assists the researcher "in selecting information-rich cases for study" (Patton, 2002, p. 230), and the method was appropriate in this qualitative study as information-rich cases enable the researcher to learn a great deal about issues of central importance to the purpose of the research (Hardon, Hodgkin, & Fresle, 2004). In other words, the goal of purposive sampling is not to generalise but to allow the researcher to obtain insight into a phenomenon (Onwuegbuzie and Leech, 2007), which is in line with the phenomenological tradition of "obtain[ing] information about a phenomenon and its meaning to the individuals experiencing that phenomenon" (Williams and Paterson, 2009, p. 694). Tongco's (2007) research on the use of purposive sampling as a tool for selecting informants concluded that: "Purposive sampling is a practical and efficient tool when used properly, and can be just as effective as, and even more efficient than, random sampling" (p. 155).

Thus, purposive sampling was appropriate because the intention was for the candidate to select research participants (project managers) who, based on their specific qualifications, could purposefully inform the candidate the phenomenon of their personal lived experience: what this occupational experience means to them, and how they make sense of it (as a project management practitioner). In this respect, the following three commonly used strategies for purposeful sampling technique, as outlined by Onwuegbuzie and Leech (2007), and Hardon et al. (2004), were employed:

- *Convenience sampling*: Project managers who met the research selection criteria ,who happened to be available, and who were willing to participate at the time of the research study (Onwuegbuzie and Leech, 2007). This is an attractive option to most researchers when generalizability is not the main objective (such as in an interpretive phenomenological approach) and cost-effectiveness is important (Nielsen and Einarsen, 2008).
- *Maximum variation sampling*: A wide range of project managers were purposively selected in this approach to present the multiple perspectives or dimensions of participants that exemplify the challenges and complexity in today's work and project

environment. This approach can also be employed as a strategy to select targeted communities for research (Hardon et al., 2004).

- *Snowball sampling*: Identified project managers relevant to the research study were asked to recommend other qualified research participants. This sampling approach, also known as network sampling (Onwuegbuzie and Leech, 2007), is perhaps the most common sampling strategy (Hardon et al., 2004).

3.4.2 Population

As mentioned, because to the importance of perceptual data and the candidate's personal association with the PMI in Singapore, the research participants were approached through the PMI Singapore Chapter. According to PMI Singapore Chapter website, it is the second largest PMI chapter in Asia, with 2005 members registered with PMI as Singapore Chapter members (PMI, 2016a).

The participants, who are members of PMI Singapore Chapter, were selected purposively for the research based on the following three criteria:

1) They were certified project managers who hold either the PMP certification from the United States PMI, the Project in Controlled Environment certification from the United Kingdom's Office of Government Commerce, or the Certification in Information Technology Project Management from the Singapore Computer Society. These qualifications ensured that the project managers were familiar with the standard project management practices.
2) They have experience in starting, executing, and completing at least one large project that involved multiple business functions in their organisations. This indicated that they had both practical and theoretical experience.
3) They were currently working on a large project that requires participation from various business functions. This was to ensure that their work on the project could be observed for this research. These criteria are essential. As Jackson et al. (2007) mentioned, "the qualitative researcher relies on the participants to offer in-depth responses to questions about how they have constructed or understood their experience" (p. 23).

The candidate ensured that her sampling strategies were responsive to real-world conditions and met the information needs of the study (Coyne, 1997), with proper industry representations informed by studies on the current state of project management (PMI, 2013c,

PwC, 2012). Considerations for the targeted population for this study included gender balance, a range of experience in project management from one year to more than 20 years, and participants from various industries.

Overall, 48 project managers participated in the study. Half of the participants were located through the PMI Singapore Chapter, and the remainder were selected through participant recommendations via snowball sampling strategy. The candidate ceased selecting participants when data saturation was achieved. In other words, sampling adequacy is evidenced when, with additional data and further analysis, the candidate failed to uncover any new thematic idea in relation to the research area of study, as recommended by Bowen (2008).

3.4.3 Ethical considerations

The candidate began conducting the research interviews upon receiving approval from International Graduate School of Business Human Research Ethics Committee (IHREC) on 17 November 2008. First, the participants received a formal invitation to participate in the research study (see Appendix 3). The information sheet informed participants of the purpose of the study and the audio-recorded interview procedures. It also highlighted the voluntary basis of their participation, any risks and possible benefits of the study, assurance of confidentiality, their right to withdraw from participating at any time, and the researcher's contact details. Prior to data collection, the candidate and participants signed the consent form (Appendix 4), indicating voluntary participation.

Care was taken that the data collection upheld the principles of academic integrity, which "is a fundamental principle of the higher education institution", representing "honesty, trustworthiness, respect, responsibility, and fairness in academic work, the integrity of which is expected to be primarily self-monitored" (Gallant, 2007, p. 391). Moreover, academic integrity carries "special importance in qualitative research" because the nature, designs, and procedures for doing qualitative research are "potentially more flexible than doing most other kinds of research" (p. 41). In conducting and reporting the research study, principles of academic and research integrity were strictly observed by the candidate and were informed by the most common ethical concerns, as documented by Yin (2011), King (2009), and Price, Drake, and Islam (2001). These concerns include: data collection issues, confidentiality, declaration of conflict of interest, and avoidance of scientific misconduct.

Data collection–related issues can be an ethical concern when they relate to informed consent and sampling methods (Price et al., 2001). The candidate provided participants with the information sheet and explained the purpose of the research, highlighted the voluntary basis of their participation, and ensured the participation consent forms were signed. It is essential to assure the *confidentiality* of research participants' identities, including those appearing in audio recordings and computer media (Yin, 2011). All information related to the research study was appropriately safeguarded by the candidate to ensure the confidentiality of all research participants involved. *Conflict of interest* may cause the data to be contaminated by personal interests or may indirectly compromise the ability of an individual to carry out his or her professional duties objectively (King, 2009). To the candidate, avoidance of such compromised situations is the best policy. *Scientific misconduct* is a term that covers fabrication, falsification, plagiarism, and other approaches that deviate from those considered ethical within the scientific community (King, 2009). The candidate has clearly declared her relationship with the research participants, with the research study conducted in a publicly accessible and honest manner, employing an orderly set of research procedures with findings and conclusions drawn in reference to the collected interview data (Yin, 2011). In addition, research findings were used appropriately with no abuse or alteration of collected information. All sources and references were fully disclosed by employing a software tool—Turnitin—to assist in proactive prevention of unintentional plagiarism (Graham-Matheson and Starr, 2013).

3.5 Data collection methods

Data are "the foundation for a research study" (Yin, 2011, p. 129). Because research designs can change as a study progresses, "qualitative researchers need to be open to variations in what and how data are collected" (Hays and Singh, 2012, p. 221), and research questions should serve as a guide for data collection methods (Maxwell, 2005).

Interviews are widely used in qualitative research across many disciplines and are one of the most important qualitative data collection methods (DiCicco-Bloom and Crabtree, 2006, Hays and Singh, 2012, Petty et al., 2012, Qu and Dumay, 2011). There are three broad categories of questioning that can be used during the interview process: structured, semi-structured, and unstructured interviews (Britten, 1995, Petty et al., 2012). Interviews can occur in an individual setting or a group setting, called a focus group (Qu and Dumay, 2011). An individual interview is generally carried out face-to-face, by telephone, or via the Internet

(Petty et al., 2012); typically lasts between 30 minutes and 90 minutes (Petty et al., 2012); and is audio-recorded for later transcription (Petty et al., 2012). The biggest barrier to gathering credible data through the individual interview process is people, because of the reliance on the interviewee to provide relevant, honest, and open answers; hence, the interview process demands a high level of engagement (O'Leary, 2004). Conducting a qualitative research interview is not a trivial thing. Qu and Dumay (2011) highlighted that "[i]t requires not only the use of various skills, such as intensive listening and note taking, but also careful planning and sufficient preparation" (p. 239).

The data collection method employed in this research was semi-structured, face-to-face, individual interviews. The candidate decided to conduct individual interviews instead of focus group interviews because it allows all individual voices to be heard, requires less skilful facilitation to manage group dynamics, and suits the sensitive nature of this study (Petty et al., 2012, Qu and Dumay, 2011). Semi-structured questions were employed because the candidate was familiar with and had experience with the research topic, and had an understanding of the parameters of the research. Miles and Huberman (1994) accepted this as an acceptable data collection strategy as it builds internal validity and reliability, comprehensiveness and manageability. In addition, a semi-structured individual interview allows the candidate to address issues of trustworthiness while maintaining a feeling of openness (Kvale, 1996).

In line with aims of the research study, the individual interview questions (see Appendix 2) were developed from the research questions, which were formulated based on the gaps and areas highlighted by the literature review in Chapter 2. This is because "research questions provide the scaffolding for the investigation and the cornerstone for the analysis of the data" (Anfara, Browne, & Mangione, 2002, p. 31) and "the literature review serves as a foundation for forming research questions" (Mertens, 2010, p. 115). Each interview question is related to one of the two research questions, as shown in Table 3.1.

Table 3.1: Interview questions

Research Questions	Interview Questions
1. **How do project managers conceptualise being a professional in their working role and what criteria do they use?**	2. Do you consider project management practitioners as professionals and how do you define being a professional means? 3. Have you ever met any individual who does not qualify as a project manager but claims to be one?

	4. Do you consider the current standard bodies of knowledge sufficient and unique for project management professionalisation? 5. To what extent do you think that project management practitioners are able to operate/work autonomously when executing projects as opposed to having to constantly check with his or her superior? 6. What form of training preparation do you think project management practitioners need in order to prepare themselves for this role of being a professional? 7. Do you think there is sufficient project management related education made available for project management practitioners in Singapore? 8. What kind of certification process should exist to keep unqualified project managers out and should there be any gatekeeping process or procedure? 9. Do you feel that project management professional association helps to promote project management profession (occupation) in the eyes of public?
10. **What is the strength of the project manager's motivation to commit to the process to achieve a stronger professional status?**	11. How much more should project management practitioners do or need to do, to promote project management professionalisation? 12. What do you perceive as likely success or essential elements in this journey towards project management professionalisation?

In addition, the development of effective interview questions was informed by the interview design principles put forward by Britten (1995), DiCicco-Bloom and Crabtree (2006), Edwards and Holland (2013), Jacob and Furgerson (2012), Petty et al. (2012), Qu and Dumay (2011), and Turner (2010). These included the following procedures:

1) The candidate began the interview with preliminary or warm-up questions, such as "Can you tell me about your experience in project management…" or "Do you recall how you started your career as a project manager…". Asking the participant for basic background data was a way to establish trust and rapport, to kick- start an interview, and to get the participant talking before the main interview itself (Jacob and Furgerson, 2012, Qu and Dumay, 2011).
2) The candidate constructed a logical flow of the overall interview by arranging questions in order from those that are least difficult to those that are most difficult

or challenging (Jacob and Furgerson, 2012). The first question was broad and open-ended (DiCicco-Bloom and Crabtree, 2006), so that the participant can answer easily, and the questions then proceeded to more challenging or sensitive topics (Britten, 1995, Jacob and Furgerson, 2012).

3) The candidate ensured interview questions were broad and open-ended so that the participant was able to choose his or her own terms when answering questions (Turner, 2010). In addition, interview questions were worded clearly, as neutrally as possible and without leading questions (Britten, 1995, Turner, 2010).
4) The candidate used follow-up and probing questions to direct questioning and to encourage the participant to elaborate on his or her response (Edwards and Holland, 2013, Qu and Dumay, 2011), for example: nodding, "mmm", or "Could you elaborate further?", or "Can you tell me more about that?".
5) The candidate affirmed the participant's responses with silent nodding of the head or saying "yes", "I see" and so on as the interview progressed. In addition, echoing the last point that the participant described, proved useful, especially when describing a process or event (Edwards and Holland, 2013).
6) The candidate ensured that the last interview question provided a conclusion to the interview and left the participant feeling appreciated or otherwise glad with the overall interview outcome (Edwards and Holland, 2013).

Finally, the developed interview questions (see Appendix 2) were pilot-tested with the first two research participants before the question list was finalised. The aim was for the selected participants to assess the clarity and adequacy of the questionnaire for the research study, to reduce bias, and to validate the estimated time required to complete the questionnaire during the interview (Harrison, 2012, Peat, Mellis, Williams, & Xuan, 2002, Waltz et al., 2010). Overall, the pilot-test participants were able to answer all the interview questions but provided some suggestions to improve the clarity, flow, and open conversations about their project management experiences (e.g. remove references to specific industry project management practices).

For this research study, all individual research interviews were conducted during the day or evening (outside office hours) at appropriate private locations agreed to by the participants, in order to avoid or reduce work disruptions and travel inconvenience. As mentioned, research participants were approached through the PMI Singapore Chapter after obtaining the approval from IHREC, using purposeful sampling strategies. Additionally,

through participant recommendations, additional participants were also located through the use of the snowball approach. Those who were identified as suitable research participants were emailed, to explain the purpose of the research (as approved by PMI Singapore Chapter) and to ascertain their willingness to take part in the research study. Next, the candidate followed up the introduction with emails or phone calls to set an interview date, time, and place.

On the interview day, before beginning the interview, the candidate verbally explained to the participant the purpose of the study, procedures, risks and benefits, confidentiality and highlighted the voluntary basis of their participation as outlined in the information sheet (see Appendix 3), and a copy of the information sheet was given to the participant. The candidate also requested permission to audio-record the interview. If the participant did not give permission to be audio-recorded, the candidate proceeded with the interview and took down the interview responses on paper. Following the explanation, the research participant and candidate then signed the consent form (see Appendix 4), acknowledging voluntary participation in the study. Interviews lasted 60–90 minutes and were audio-recorded, with consent, for later transcription using a computer. The services of third parties were employed to perform the initial transcriptions. Some of these transcriptions were then checked for accuracy by the candidates against the original audiotape recordings for validation. The identities of the research participants are confidential and are provided only on a need-to-know protocol to the candidate and authorised personnel of the University of South Australia. In the interest of confidentiality, pseudonyms were used in the research to substitute participants' names; anonymity was ensured in this study by having no participant's name in the thesis or transcribed documents. To honour the confidentiality of research participants, all data collected and generated by the research were safely stored in a locked facility or password-protected computer file (Bloomberg and Volpe, 2008, Wiles, Charles, Crow, & Heath 2006).

3.6 Data analysis methods

The challenge for many researchers engaging in phenomenological research study is that it generates a large quantity of data, which has to be analysed (Lester, 1999). Although many researchers consider interpretive phenomenological analysis to be messy and tedious (Boserman, 2009, Finlay and Eatough, 2012, Lester, 1999, Petty et al., 2012), the emphasis of interpretive phenomenological analysis is on the iterative process that allows rigorous

exploration of areas about which little is known (Strauss and Corbin, 1998). According to Bowen (2008), the data analysis process uses systematic coding procedures, where "newly gathered data are continually compared with previously collected data and their coding", with "the constant comparative method serv…[ing] to test concepts and themes with a view to producing a theory grounded in the data" (p. 139).

Data analysis was carried out by focusing on the following three concurrent activities as recommended by Bloomberg and Volpe (2008) and Smith and Osborn (2008):

1) The researcher read each transcript a number of times. Aspects that seemed relevant were noted and each transcript was summarised to gain an initial understanding of each participant. The transcript was further re-read to examine small components of data in comparison with the overall transcript and across all research interviews. Preliminary and emerging themes were identified and noted, and all of the themes were then listed and structured hierarchically, representing a summary of all emerging themes of the interview.
2) Data were coded to provide a condensed description of each line of data. The codes that seemed to belong together were clustered in groups and eventually grouped into themes. A framework of related categories and subcategories was then formulated and visually represented, and these categories were further developed and formed the basis of the overall themes of the research interview. This process was repeated for each transcript and then individual themes were modified and integrated into the master table of overall themes.
3) The final stage was concerned with interpreting or deconstructing the master table of overall themes into a narrative account that related to synthesis, verification, and conclusion by linking the analysis to experience, insight, and literature.

Finally, the candidate interpreted and translated the overall themes that were essential to add meaning to current understandings of the project management journey towards professional status. Analysis and synthesis then enabled the candidate to move forward and answer the specific research questions of this thesis.

For example, with a sentence being a unit of analysis, the following participant responses were coded as meaningful units and subsequently organised under the theme "training and education":

- He needs a bachelor degree at least … (Participant 03)

- I think the one important aspect of a project manager is he or she must carry the attitude of continuous learning because like I said in any project, you go to the environment is different, the industry is different … (Participant 45)
- There may be some path which can lead you to, well maybe change, or advancing your soft skills (Participant 10)

The NVivo computerised data analysis package was useful in facilitating the analysis of the research interview transcripts, by allowing the candidate to manipulate the research data through annotation, coding, searching, organising, and collating all texts relating to a specific code (Rowley, 2012). It provided the candidate with the analysis tools to query and audit the coding process, thereby enabling quick and accurate access (Azeem and Salfi, 2012) to large amounts of data records with consistent coding schemes and a more robust interpretation of research data (Bergin, 2011). In addition, the use of the NVivo computer-assisted data analysis package allowed a more rigorous approach to qualitative data analysis (Bringer, Johnston, & Brackenridge, 2004). NVivo data analysis continued until data saturation occurred, following the basic guidelines documented by Bergin (2011), Berglund (2007), Rowley (2012), and Bloomberg and Volpe (2008):

1. The first step is to organise the research data set by importing all the research interview transcripts into the NVivo computerised qualitative analysis software package (Rowley, 2012).
2. Next, each interview transcript is read carefully a number of times to acquire an initial understanding of each research participant, and to gain a holistic view of how the journey of project management professionalisation was experienced by each research participant. The goal is to get "thoroughly acquainted with the data" (Rowley, 2012, p. 268).
3. Transcribed interview texts are then divided into discrete parts, coined "meaning units" (MU) (Giorgi, 1997)—a descriptive term that represents texts with specific meaning relevant to the research study. These MUs can be recorded as free nodes in NVivo. A free node in NVivo is basically a stand-alone node that has no clear logical connection with other nodes. This can be useful during the initial stage of coding when there is not yet a node structure (Bergin, 2011). Among all the research interview transcripts and coded MUs relevant to this research study, a total of 95 free nodes were created (Appendix 5).

4. All MUs are iteratively grouped, with those having similar meanings clustered into an existing category or given a new category (for new issues that emerge during coding), until all MUs have been clustered into categories that capture the specific homogeneous qualities of what was narrated by the research participants (Berglund, 2007). In NVivo, these representations are thought of as tree nodes and are "organized in a hierarchical structure, moving from a general category at the top—the parent node—to more specific categories or child nodes" (Bergin, 2011, p. 8).
5. Categories of grouped MUs that were found to have comparable motifs were merged into themes and overarching, broader themes (Berglund, 2007). In order to capture the specific homogeneous qualities of what was narrated by the research participants, these merged themes and broader themes are organised, grouped, or clustered into sets in NVivo. Clustering nodes in a set helps to identify nodes that are meaningful and is "useful for grouping together nodes that focus around a common, broader concept, or are connected in a broader theme or theoretical relationship" (Bazeley, 2007, p. 112).
6. Finally, a master table is created of MUs, categories, themes and broader themes, all with the relevant coding. The hierarchical structure and data clustering process in NVivo makes it easier and more convenient to identify and reduce categories (or nodes) that overlap, share similar properties, or have limited references (Bergin, 2011, Bloomberg and Volpe, 2008).

In order to capture the richness of the findings and distinguish between what the research participants shared and the candidate's interpretation, the research participants' accounts are presented as direct quotations (Bloomberg and Volpe, 2008). Similarly, in Corden and Sainsbury's (2006) research on the inclusion of respondents' verbatim quotations within reports of applied research findings, they explained the purpose of using verbatim quotation "as the matter of enquiry; as evidence; as explanation; as illustration; to deepen understanding; to give participants a voice; and to enhance readability" (p. 11). On the other hand, Kaiser (2009) noted that "balancing rich data with the need to protect respondent confidentiality" (p. 1639) presents unique challenges in qualitative research. Therefore, in the interests of confidentiality and to ensure participants' narrations are not attributed to any particular or specific individual, pseudonyms are substituted for participants' names (Corden and Sainsbury, 2006, Wiles, Crow, Heath, & Charles, 2008).

3.7 Reliability and validity

Still ongoing to some extent is the debate about what constitutes quality in qualitative research. According to Seers and Toye (2012), the answer is not straightforward, even though there are various criteria available for evaluating qualitative research. In qualitative research, reliability is conventionally demonstrated by the trustworthiness of the procedures and data generated (Stiles, 1993), whereas validity is measured in terms of how well the research instruments measure the phenomenon under analysis (Punch, 2005). Finlay (2008) described how the quality of any phenomenological study can be evaluated "in its relative power to draw the reader into the researcher's discoveries allowing the reader to see the worlds of others in new and deeper ways" (p. 7).

According to Merriam (2009), ensuring reliability and validity in quality research involves performing the research in an ethical manner. For Morse et al. (2002), reliability and validity are achieved when the researcher rigorously adheres to a number of verification strategies at the end of the research, rather than focusing on the process of verification during the study. Similarly, Roberts et al. (2006) noted that: "In determining the reliability and validity of research, reducing error is of prime concern" (p. 45). In their book about qualitative research from a practical perspective, Merriam (2009) and Yin (2011) suggested the following strategies for evaluating qualitative research:

- *Transparency*: The research procedures should be transparent, with all research data available for inspection, and the undertaken research study should be able to withstand close scrutiny and examination by others. Is the qualitative research done in a publicly accessible manner? Are the people reading the research findings able to scrutinise the work and all evidence used to support the research findings and conclusions?
- *Methodic-ness*: Doing qualitative research methodically means following some orderly set of research procedures: apply rigorous routines to minimise careless work, avoid unexplained bias, and finally, bring a sense of completeness to the research effort. In addition, there needs to be ample space for discovery and accommodation of unanticipated events.
- *Adherence to evidence*: Regardless of the kind of data being collected for a qualitative research study, the findings and conclusions should be drawn from the collected data. For instance, in phenomenological studies in which research participants narrate their experiences, speech is prioritised, as language enables better understanding of the

importance that a participant attributes to his or her experience of the world (Jurema et al., 2006). As such, qualitative research objectives should be based on an explicit set of evidence.

- *Consistency*: Traditionally reliability or consistency describes the extent to which the research findings can be replicated. The more precise question for qualitative research is whether or not the research results are consistent with the data collected. The use of probing questions during qualitative interviews and observation of nonverbal cues (facial expressions, gestures, postures, and other nonverbal indicators) are means of encouraging research participants to validate and elaborate their answers, and thus increase the consistency of the findings. In addition, maintaining an audit trail or keeping internal memos on the process of conducting the research as it is being undertaken, can help ensure consistency by describing in detail how qualitative data were collected, how categories were derived, and how decisions were made throughout the study.

The candidate used the strategies documented by Merriam (2009), Morse et al. (2002), Roberts et al. (2006), and Yin (2011) to ensure the reliability of the data generated during the research interview. In addition, the NVivo computerised data analysis package was employed to enhance reliability (Roberts and Woods, 2000) by making use of the analysis tools and facilities built into the software package (Azeem and Salfi, 2012, Roberts et al., 2006). Likewise, to ensure technical accuracy of the recording and transcribing of all research interview proceedings (Roberts et al., 2006), all transcriptions were personally checked for accuracy by the candidate against the original audio recordings.

Additionally, to overcome any misinterpretation of research data, a graduate researcher who held a qualification in information science and who was familiar with qualitative analysis was engaged to code several transcripts, with an average of more than ninety per cent of MUs similar to the candidate's coding, ensuring reliability of the analysis and findings (Weber, 1990). Transcripts were then randomly selected and sent back to the research participants for review and validation, thereby providing the candidate with an opportunity to validate and minimise bias in the candidate's data collection, interpretation, and presentation of research findings (Roberts et al., 2006). This is in line with Dickson-Swift, James, Kippen, and Liamputtong (2007), who stated that "Accurate transcription is a fundamental first step in data analysis" (p. 337).

The interview questions were also pilot-tested and continuously refined, based on the responses from the research participants. From the candidate's perspective, the pilot-testing and refinement processes helped to improve and enhance the validity and adequacy of the interview questions for the research study. These processes also helped to avoid bias and validate the estimated time required to complete the research interview (Harrison, 2012, Waltz et al., 2010).

3.8 Research limitations and challenges

There is a consensus that undertaking qualitative research can present many challenges for researchers (Anfara et al., 2002, Boserman, 2009, Britten, 1995, Finlay, 2008, Hardon et al., 2004, Mertens, 2010, Petty et al., 2012, Roberts et al., 2006, Rolfe, 2006, Rowley, 2012, Turner, 2010). Some of the challenges faced by the candidate include issues related to conducting interviews (Britten, 1995, Rowley, 2012, Turner, 2010), ensuring research rigour (Anfara et al., 2002, Roberts et al., 2006, Rolfe, 2006), framing research questions (Mertens, 2010), avoiding potential bias (Hardon et al., 2004, Mertens, 2010), and analysing research data (Boserman, 2009, Finlay, 2008, Petty et al., 2012).

Many of these challenges are unique to qualitative research studies. Some of the measures that the candidate implemented to address them included pilot-testing the research interview questions (with the first two research participants) and continuously refining them based on the participants' responses. These strategies were aimed at improving internal validity and ensuring the adequacy of the questions (Harrison, 2012, Peat et al., 2002), to make certain that all research participants were able to understand and respond to the interview questions accurately (Rowley, 2012). To manage and ensure research quality and rigour, all transcriptions were personally checked by the candidate against the original audio recordings for accuracy and randomly selected transcripts were sent back to the participants for review and validation (Roberts et al., 2006). In addition, the candidate engaged a graduate researcher to code several transcripts to help minimise any unexplained bias in the candidate's data analysis, interpretation, and presentation of research findings (Roberts et al., 2006, Weber, 1990, Yin, 2011).

Other potential limitations of this interpretive qualitative research included getting research participants fully engaged in the interview process, familiarisation with analysis of interview data (Rowley, 2012) and minimising potential sources of interpretive phenomenological research errors (Roberts et al., 2006). In line with the importance of

reducing research errors to enhance the research reliability and validity, this study was conducted methodically with an orderly set of transparent and rigorous research processes and procedures (Yin, 2011), cross-checked with published literature (Williamson, 2005). In addition, the candidate's expert knowledge and work experience (Lopez and Willis, 2004) in project management were valuable in guiding and keeping the research interviews moving, sustaining the research participants' engagement, and making sense of the interview data (Rowley, 2012).

3.9 Chapter summary

This chapter described the rationale or justification for the use of interpretive phenomenological qualitative methodology to explore the meaningful lived experience of project managers in their journey towards professionalisation. From the candidate's standpoint, by bringing the candidate closer to the very essence of the phenomenon, this approach offered a rigorous exploration and the prospect of uncovering areas about which little is known. The population of interest for this study was project managers of the PMI Singapore Chapter. Because the primary objective of this research was to select a particular group of participants based on specific purposes associated with answering the research question, the sampling technique chosen was purposive, focusing on selecting 48 qualified project management practitioners to whom the investigated phenomenon makes sense.

The data collection procedure employed was semi-structured face-to-face interviews, which allowed the candidate to explore rich and in-depth information about the interviewee's meaningful experiences. Field research began only after obtaining the required ethics approval from IHREC, for which this research study met all guidelines, including provision of the information sheet, obtaining signed consent, and the assurance of confidentiality.

On the other hand, the interpretive phenomenological data analysis utilised the iterative process of systematic coding that continually compares newly gathered data with previously collected data and their coding. This constant comparison served to test concepts and themes with a view to assessing whether or not the newly created codes were relevant for developing and refining theoretical categories (Bowen, 2008). A framework of related categories and subcategories was formulated and represented visually, and these categories were further developed, forming the basis for the overall themes of the research study. The final aim of data analysis was to interpret the master table of overall research themes, drawing interpretations and conclusions through a comparison with the literature.

Reliability and validity of research were accounted for through pilot-testing and continuous refinement of interview questions, member checks of randomly selected interview transcripts, and the validation of transcripts against the original audio recordings and internal memos. Undertaking qualitative research can present many challenges. Some of the limitations and challenges included managing the candidate's personal bias, fully engaging participants, and familiarisation with data analysis. In conducting and reporting the research study, the candidate observed the principles of academic and research integrity strictly. The subsequent chapters in the thesis will elucidate, explain, and discuss the research findings and results by employing the research methodology outlined in this chapter.

4 DATA ANALYSIS AND RESULTS

4.1 Introduction

The purpose of this qualitative phenomenology research study is to uncover whether or not project managers have a shared understanding of what is required from them in their progress towards professionalisation, their confidence in achieving a successful outcome, and how committed they are to the journey. The information gathered in this study was derived from 48 participants, most of whom were practising project managers. Face-to-face interviews were conducted in which the participants shared their opinions and experiences as project managers on the professionalisation of the occupation.

This chapter discusses the data analysis and the findings from the interviews. The data were teased out by asking the participants relevant interview questions that were designed to answer the two research questions:

Research Question 1: How do project managers conceptualise being a professional in their working role and what criteria do they use?

Research Question 2: What is the strength of project managers' motivation to commit to the process to achieve a stronger professional status?

4.2 Population demographics

The participants were selected based on their affiliation with the PMI Singapore Chapter or recommendations from other research participants. The following table tabulates the participants' demographics that will form the basis of their opinions and experiences.

Table 4.1: Participants' gender

Gender	Number of participants	Percentage of participants
Female	8	17%
Male	40	83%

Table 4.2. shows the participants' number of years of work experience. The extent of most participants' project management experience reflects the extent of their total working experience, whereas others' project management experience has been intermittent throughout their working lives.

Table 4.2: Participants' years of experience

Years of experience	Number of participants	Percentage of participants
1—5	3	6%
6—10	13	27%
11—15	8	17%
16—20	11	23%
Above 20	13	27%

Table 4.3 presents the areas in which the participants last practised project management, bearing in mind that there are project managers who manage different types of projects. Their opinions on whether they find project management skills to be portable will be explored later in this chapter. There are no available data on whether the breakdown represents the total distribution of project managers in Singapore.

Table 4.3: Participants' areas of project management practices

Areas of project management practices	Number of participants	Percentage of participants
Construction	1	2%
Engineering	3	6%
Organisational	8	17%
Information Technology	36	75%

In general, 15 industries were represented in this research sample. Table 4.4 presents the breakdown of industries, revealing that almost two-thirds are from service industries (healthcare, IT, banking and consulting). The representation of different industries is similar to that of the PMI's survey on Singapore's project management salary (PMI, 2015a), in which the majority (31%) of project managers were from the services industry, followed by financial (14%), manufacturing (9%) and engineering (8%).

Table 4.4: Participants' industries

Industries	Number of participants	Percentage of participants
Construction	2	4%

Manufacturing	3	6%
Public Administration	3	6%
Transportation, Communication and Energy	5	11%
Finance	6	13%
Services	29	60%

4.3 Data analysis procedures

During the data analysis exercise, several unanticipated issues and concerns were raised and recurred in a number of interviews; for example, several research participants shared concerns about the quality and aspects of the ethical practice of project managers. To gain further insight, research participants were asked to reflect on and appropriately describe and disclose the unique characteristics that they believed differentiated project management practice from other disciplines, what they believed to be the key processes that could turn project management practice into a profession, and the strategies that might shape and drive professionalisation.

4.4 Findings from the interviews

This section highlights the thematic findings from the research interviews regarding what project managers understand to be the construct of professional identity and their commitment to the journey to gaining professional identity.

4.4.1 Project management identity construct

Research question 1 pertains to the project managers' understanding of the construct of their professional identity. The project managers' understanding of their identity highlights the elements of their identity that they assimilate and the common elements will point to elements that make them different from other occupations. Project managers became members or part of a group through identification with project management core values, practices, and personal identity (Ferguson and Ramsay, 2010, Nash and Shaffer, 2011). Based on the participants' sharing of their perspectives on and experiences of their professional identity formation and development during their project management careers, more than half (52%) of research participants felt that a project manager's professional identity is not a fixed concept and varies according to contextual factors, such as the

definition of a project manager, the scope of the management practice, the stakeholders, the project environment, the size, and the complexity of the project. Participant 02, a program manager in the consulting services, found it difficult to define a project manager's professional identity because it depends on the industry and situation of the project practice:

> Well, it depends on what you mean by the context. It could be professional the way you conduct yourself. The way you approach a certain matter. Or it could be that following a particular standards set of processes or methodology. But I think that's a bit hard to apply to project management because; one, it depends on which industry you are in; two it depends on the situation you are in. (Participant 02)

Similarly, Participant 31, a managing director of an IT consulting organisation, referred to project management practice as a vague profession, because the practice varies between organisations:

> Project management is a very vague profession I would say that. It's pretty much varies from organisation to organisation. (Participant 31)

On the other hand, Participant 37, a senior manager in the technology department of the healthcare industry, felt that the project management scope of practice is very generic and different industries require different aspects of project management skills and expertise.

> I think because project management by itself is very generic. You can do a lot with it. Different industries probably require different kinds of areas of project management skills. Like for example I think in the construction area and in the IT area, you both have project management. But the degree of the maybe the details and all that are quite different. (Participant 37)

As a result, there were different perspectives on the elements that constituted professional identity for project managers. Some participants cited professional identity as skills and knowledge competencies required for project work, including project expertise, soft skills, and past project work experience. Others considered that professional identity was embracing professional work conduct or ethics, which included integrity, teamwork, responsibility, and accountability. Participant 16, a project manager in the public sector, felt that the ability to mentor others and manage teamwork was a quality of a professional project manager that was paramount.

> Does the mentorship help you to carry out your work in a more professional manner? I think answer is definitely yes … I would say a good project manager must be able to rally and get the team together, regardless of the conflicting interest. (Participant 16)

Interestingly, Participant 21, a project manager with 18 years of experience in the consulting services, described a professional project manager as an expert in solving project management issues.

> I find that as a professional project manager you need to solve problems and you must be very efficient in solving these types of issues and problems. So you learn project management is to manage a project better. But you can be a professional project manager because you do it so well. (Participant 21)

Participant 37, with more than 20 years of work experience, described a professional project manager as someone who can manage a project within a budget, to a schedule, and to the customer's satisfaction.

> The professional would be the person is competent in executing the three things that I mention in term of project within budget, project within schedule and customer satisfaction. If they would be able to achieve these three or close to these three, then ya, they achieve project management or professional certificate or professional status for that type of project that they are managing. (Participant 37)

On the other hand, Participant 45, who currently heads the technology department of a social services organisation, reflected that professionalism for a project manager is like leading an organisation with exemplary project work ethics.

> So professionalism encompass individual embracing work ethics integrity, honesty, the value of working hard working as a team, caring for your teammates, so that's how I view professionalism for a project management role whereby the leader is not just a figurehead but as good or even as high as CEO or a CIO. (Participant 45)

Nevertheless, this research analysis managed to establish common characteristics of project managers' professional identity as perceived by project managers themselves.

4.4.1.1 Theme: Body of knowledge

Claims to exclusivity over the body of knowledge refers to the efforts of a professionalising group to legitimise the monopolisation or exclusive control and use of a particular knowledge set (Hirschkorn, 2006). Generally, research participants (Participants 01, 04, 47) acknowledged that the existing PMBoK helps to facilitate a better understanding of project management processes and technologies. In fact, one participant (Participant 24) believed that PMI, as the leading project management association, has gained traction by regularly maintaining and enforcing their PMBoK.

> But when you are certified, you analyse thing in a process way what PMP, PMI or other organisations suggest ... So that is the advantage I have got. (Participant 01)

> Though we have in-house seminar or whatever, there is no formal training ... so people normally learn by seeing what his manager has been doing. So in that respect, I mean PMBoK has given me some additional knowledge which I can actually use ... (Participant 04)

> Of course if you look at the book of knowledge ... This is a guideline where you can actually adapt from it to suit each project because each project has different characteristics which require different aspect of that skill set. (Participant 47)

> As PMI is concern, they are continuously updating their standard and guidance; for example, recently in December they came out with the guideline, which added a few more things in certain area. They are doing their best to keep up with the current market situation ... So, it is quite good and there are also a lot of opportunities to get exposed to quite a lot of things. (Participant 24)

Despite a favourable perception towards the idea of a body of knowledge, the existing PMBoK lacked exclusivity because, in this research, participants reported employing a wide variety of methodologies, as illustrated in Table 4.5.

Table 4.5: Reported use of project management methodologies

Methodologies	Number of participants	Percentage of participants
In-house	12	25%
Mixed method	10	21%
None	9	19%
PMBoK	9	19%
IT methodologies	4	8%
CITPM	3	6%
Others	1	2%

The most widely used project management methodology was in-house methods, used by twenty-five per cent of the research participant respondents. A significant number of research respondents (21%) reported using a combination of mixed methods— the most common being PMBoK, CITPM and IT methodologies. Together, in-house and mixed methods accounted for almost half of the reported use of project management methodologies. Several research participants (Participants 12, 16 and 18) spoke about the use of in-house methodologies because their involvement in project work required specific processes and knowledge, such as in the financial and military industries. In addition, some research interviewees (Participants 21 and 45) explained that during their involvement with project management practice, project management methodologies just started to emerge, so they had to employ and create in-house methods and processes to manage specific project work.

> Somehow I think the methodology of project management is also depending on the company … during my days of doing project management in OCBC (bank), right? Somehow the project still delivers in certain sense … (Participant 12)

> They (the organisation) sent me to UK to project manage, to learn about defence, as well as how to manage various projects. So I learned the life cycle, what are the things to look out for, what are the pitfalls, and what are the best practices … (Participant 16)

> So I think let start from project engineer. I come from China, and then I join the Singapore Company. The first one I do, I think a little big ahh … a quite big project. This one for the inventory control system in the Singapore … for Singapore army. (Participant 18)

> And during my MBA [Masters in Business Administration], they have some project management modules also. So I took from bits and pieces and took some reading offline so I created my own so-called process. That times no PMI. That was 15 years ago … What we do is that it is very logical and analytical mind where you define the problems that are project management, the kinds of objectives, from there you worked towards it and you break it down into different portions … You simplified everything so it is very logical in terms of solving. (Participant 21)

> I think in the 80s as you probably know there were no such term as project managers and most of the projects were all handled by system analyst and their job is to analyse the system besides maintaining it, then and there when there were new projects people were assigned, so back then in the 80s there wasn't any methodologies and people were just using simple forms and templates to do the scoping. I think at that point of time Microsoft project is not even out so I guess that is where Microsoft saw a need in the market and they came up with Microsoft project and of course that is where you have got milestones, deliverables, all link and everything. (Participant 45)

Several research participants (Participants 24 and 40) reported using a combination of methodologies for project practice because of their past exposure to various methodologies during project work. Similarly, some participants (Participants 06 and 31) reiterated that often the customer decides the methodology to use in a project in a consulting environment:

> I've worked in multinational companies like IBM. I worked with regional company on major financial decision like banks. I've worked with large software houses like HCL, Tata. Each one has their own methodology and best practices to support. Some of them have their own internal thing but some of them use the industry accepted standards and practices. (Participant 24)

> I mean I was fortunate. I came from larger organisation. The training was obviously very structured. So as a trainee, when you do programming for example we will talk all the programming standards. Then when you move on to learn the analysis and the design skills, we were taught; that time it was called structured analysis, structured design methodology, that sort of things you know. So if I remember, I was sent to courses like in ISS and to IBM that sort of places … I think the training has all that; whether you learn in course or you learn in class, seminars, conference in school, helps you to give you the foundation. (Participant 40)

> Actually to be truthful, if you are able to have opportunity to manage a large-scale project, the methodology is implied in the contract … And for me I was lucky I was in a very big system integration house and I also have the opportunity to execute a few, 2 or 3 projects span over 4 to 5 years. (Participant 06)

> For last eight years we have been managing project management practice where we provide the project management consulting and uses to the clients … We have the banking client. What do they need actually, they have a project, which has got certain objectives, certain purpose … so they need external person who could able to lead and manage this whole program. So that is where actually we came in and we provide the project management services. (Participant 31)

To summarise, eighty-one per cent of research participants reported the use of project management methodologies in their practice. This indicates a general acceptance that project management practitioners must be trained in project management methodologies in order to capitalise on their benefits. Despite the importance and clear use of it, this research revealed that the existing PMBoK still lacked exclusivity because of the reported wide use of various methodologies. Participant 38, an IT director in the healthcare industry, explained that different countries might have their own forms of standards for the practice of project management, which adds confusion and contributes to the lack of standardisation.

> For project managers you have some standards … but how widely is it adopted? Yes every country will have some form of standards, but it is not very well coordinated. (Participant 38)

Similarly, Participant 47, who heads the technology department of a statutory board, said that some project management practices were bounded by organisation or workplace culture.

> Well, a number of them are unfortunately, are bounded by companies I guess culture. Because some companies have their own methodology which is different from PMP or CITPM way of doing things. (Participant 47)

Thus, although some research participants accepted that the existing PMBoK provides the foundation for better understanding of project management processes and technologies, a significant majority of participants believed that project management methodologies are still evolving and lack standardisation in their approach to managing projects. The research results also showed that, because of past exposure to various methodologies during project work and because, often in a consulting environment, the customer decides the methodology to be used in a project, in-house or a mixture of methodologies accounted for almost half of the methodologies used.

4.4.1.2 Theme: Training and education

Training and education requirements in this context refer to project management training and educational resources essential for practitioners in the delivery of project outcomes to meet the needs of various project stakeholders and future challenges. Approximately ninety per cent of research participants acknowledged the importance of project management training and education because of the need to adapt to the changing nature of projects as a result of socio-economic pressures and rapid technological innovations (Todhunter, 2013). Participant 35 noted that the complexity and uncertainty in projects made projects difficult to control and manage:

> But it is just that the amount of unknown and uncertainty in the IT project is beyond the ability of project management techniques to control … (Participant 35)

Participant 45 explained that the complexities and uncertainties of projects resulting from socio-economic pressures and rapid technological advancements necessitated the demand for continuous project management education and training:

> I think the one important aspect of a project manager is he or she must carry the attitude of continuous learning because … the environment is different, the industry is different … (Participant 45)

Likewise, both Participant 03 and Participant 07 added that project managers should continue pursuing professional seminars, workshops and courses to improve their knowledge further:

> Apart from that, once he (project manager) has that basic education then he can add up by taking some professional courses to know more … (Participant 03)

> You could do that by attending two days session, seminars, workshops or you can take a break and do a six months study. It is really up to you but continuously upgrading your skill is very important. (Participant 07)

Many participants (Participants 03, 06, 07, 11, and 15) believed that there should be basic educational requirements for project management practitioners, such as a basic diploma or bachelor's degree from a recognised tertiary institution:

> He needs a bachelor degree at least … (Participant 03)

> It really depends on the industry, but if you are talking about engineering industry, minimum should be diploma, a good diploma holder, ya! You cannot just get someone who are 'A' level and then do project management, not possible. (Participant 06)

> Bachelor is definitely a minimum that you should have … And I believe that education is a must. (Participant 07)

> Minimum bachelor, degree. Actually, diploma is also okay. (Participant 11)

> Typically yes (a basic bachelor degree). Because I would say that it is a human interaction aspect that you normally learn in university, because there are a lot of project-related things that you do in the university… (Participant 15)

In addition, Participant 26, who heads the technology department in a telecommunications organisation, agreed that project management training and education helps many project managers to be more proficient in their practice.

> Well we can go analyse all these (project) failures and see how many per cent of the project managers, they are certified. From my gut feel is, the project management training has helped a lot of people become more proficient in project management. (Participant 26)

Many research participants (Participants 33, 35, 38, 39, and 40) also stressed the importance of supplementing academic knowledge with real project work experience:

> You may be certified because you have the knowledge but unfortunately you do not have the practical experience … There are no shortcuts to being a good project manager. (Participant 33)

> And it does not mean that okay, they come out of school with a certification and they just go for their masters and that will make them a good project manager. I think that will make them a good academic project manager … but nothing substitutes for the real-world experience. (Participant 35)

> You can go through the certification … That only gives you an exposure of what is likely scenario in real-life case would be and equip you with some tricks or tools to respond. But it will not beat any real experience in encountering the situation, how do you resolve the situation. I suppose on the job training is still a must … (Participant 38)

> Because many of the theories would not be immediately relevant. A better way would be for somebody to get involve in project management work for a couple of years and then get to the PMBoK. (Participant 39)

> Certification training is only useful when it is done hand in hand with practical experience and mentoring. (Participant 43)

Several of the interviewees (Participants 10, 21, and 46) highlighted the lack of an overall defined training and education curriculum for project management practitioners seeking basic and continuous professional training or education opportunities. In addition, both Participant 21 and Participant 46 pointed out that project management does not have a home faculty within the higher education institutional setting.

> There may be some path which can lead you to, well maybe change, or advancing your soft skills. But there is nothing for certain, which is specific to project management. (Participant 10)

> I graduated as a MPE (Mechanical Production Engineer); they have these project management modules that we have to study … And during my MBA, they have

> some project management modules also. So I took from bits and pieces. (Participant 21)

> Therefore I think the project management education here is not something compulsory. Some schools (in university) may have it, some schools may not have. I think a lot is there for the students to question, you know, to take the subject. And of course when you are talking about teaching such subjects, sometimes the students cannot appreciate it because they have not learned it before. (Participant 46)

When asked about the quality of local project management education, Participant 39, an associate professor with project experience at a local higher education institution, responded that there was still room to improve the current levels of project management training and education:

> I do not think it (project management education) has reached a mature stage that we can say okay, we have done our best and this is going to be a static situation. I think for any educational certification process to be relevant, it has to evolve in tandem with the development in the industries as well as in the research. (Participant 39)

There was good support for the PMI Singapore Chapter's professional development activities as described by Participant 01, Participant 03, Participant 08, Participant 10 and Participant 28. Participant 08, a project manager in the consulting industry, believed that the local chapter of the project management professional association was on the right track in promoting project management competencies by organising seminars and lectures conducted by guest speakers who are well-versed in project management and related subjects. Similarly, Participant 10, an IT project manager in the banking industry, felt that these seminars and conferences organised by the local chapter of the project management professional association were timely, informative, and beneficial for project management practice.

> OK, I think Singapore chapter is very new in PMP, PMI ... I think they are doing very good; they are arranging lot of sessions on that, different sessions on that. I have another on 6th March, I am going to attend one and second one is on 20th March. Ya, I attended regularly, till now I have attended some 7 or 8 sessions, so I already gained some PDUs (Professional Development Units) ... (Participant 01)

> Like PMI they will think of, by organising every month right, to promote, is trying to give out all the knowledge or something, sharing some kind of thing ... Ya, continuous learning. Ya, they really help actually, that is one, because they try to share the successful ways, like what I found like last 2 weeks back I attended this one right, the marina barrage, that one from there I found like teamwork was very important actually ... (Participant 03)

> I think they are already doing it. That is what the PMI local chapter; they give you sessions conducted by very experienced project managers … (Participant 08)

> I think they (PMI local chapters) are on the right track, they are doing what is required; they are holding conferences, seminars, getting speakers to speak up in seminars, which are essentially giving people the right skills. Every seminar I go to, I get back some skills, unless I am sleeping through the entire thing. (Participant 10)

> I know, the role of PMI, I think they have done a lot and they have been improving over the last couple of years since I join the PMI. The PMI Singapore chapter, I can see the crowds grow tremendously and definitely more activities. With bigger crowd things can you know, more varieties can be presented. So it's improving as I can see. (Participant 28)

Clearly, the development of proper training and education is an important criterion towards project management professionalisation. In this research, most of the feedback from participants revolved around the importance of, and requirements for, project management training and education. This includes the need for a recognised academic award for the advancement of project management practice, supplementation of academic knowledge with relevant project work experience, and an overall defined training and education curriculum for project management practitioners seeking basic and continuing professional education. To date, project management has no fixed faculty within the institution of higher learning and because of the lack of an overall defined training and education curriculum, project management practitioners are often unsure whether to seek professional certification or higher education.

4.4.1.3 Theme: Certification and licensing

Gatekeeping control of certification and licensing refers to the quality assurance process that ensures the effective and proper certification and legitimate licensing schemes for project managers. In this study, research participants were asked about the relevance of a certification and licensing requirement to enhancing the project management professionalisation in Singapore. Of the research participants, forty-two per cent possessed some form of project management certification. The breakdown of these project management–related certifications is provided in Table 4.6.

Table 4.6: Breakdown of project management certifications

Types of certification	Number of participants	Percentage of participants
PMP	17	81%
CITPM	3	14%

Others	1	5%

The PMI's PMP credential accounted for eighty-one per cent of certifications held and the Singapore Computer Society's CITPM accounted for fourteen per cent of certification. Only one participant (Participant 28) reported having both. Research participants who were in favour of certification believed that certification considerably improves the chances of getting a project management job (Participants 06, 08, 30,32, 45 and 47), and Participant 06 felt that certification is an important foundation for a project manager's career development. In addition, both Participant 32 and Participant 45 agreed that hiring managers view project management certification favourably. Participant 22 believed that the certification would reflect the project manager had the theoretical knowledge.

> I think to a certain extent, having gone through the PMP exam. For people who are new in project management, and if you really need a jump start they need to know about project management, I think PMP is quite a good way to jump start. (Participant 06)

> And then I think the PMP got me through the interview, because the person the manager here was very specific looking for somebody like professionally certified in project management. So when I came for the interview he said you been a business analyst and you also got your project management certification, will you be interested to do a project management role, then I said yes. I have not done this before but I know the processes you have and so it will be a good experience for me as well. (Participant 08)

> I mean the certification is just to help you get an interview. (Participant 30)

> If I don't see a person with this certification, I would not hire this person as the project manager. (Participant 32)

> For hiring manager who doesn't know an individual, the certification provides that base level of confidence, otherwise you know, how are you going to hire an individual that is so specialised … (Participant 45)

> Although a number of them especially those experienced project managers who said that certification is just a piece of paper … But, it helps when he talks to a clients or it helps when he is looking for a job. …What I looked at, when the person come in, walked in with a resume that said he has a CITPM, then I should be feeling very comfortable that he has the basic skills because he definitely has done some projects management compared to someone coming to tell me by a long list of resume that said he had done this, done that but he does not have CITPM. That definitely would give value to me in my mind that hey, this person did have this hard skill. (Participant 47)

> Well a PMP certification definitely erm… it gives you the theory background, alright, that a project manager needs, alright, otherwise, like what I say, you learn the hard way. (Participant 22)

In general, research participants indicated that it is necessary to undertake reviews and audits to ensure the quality of project management certification and licensing schemes. Many (Participants 11, 14, 19, 21 and 39) observed that the current level of gatekeeping control performed by PMI is not strict and comprehensive enough to ensure the quality of PMI's project management certification scheme. Participant 05 and Participant 17 also suggested that the entry criteria for PMI's project management certification should be more stringent to enhance credibility.

> Another one thing is I think Project Management Institute, they should also do audit … So if someone audit about this, it will improve … (Participant 11)

> You just take a look at the PMI certification; you know you have to spend like three years being in a project … I think there are just too many people who are not project managers who are being certified. I think there is not enough audit. A bit too relaxed … (Participant 14)

> If you asked me, I would hope that they have the resource to audit everyone that submits their experience to really prove that … I think that would actually really add on to the credibility of PMP certification. (Participant 19)

> So you need to up the ethics of the project management. You need to provide this third party auditing … (Participant 21)

> Currently the profession is not rigidly gate-kept. Anybody who aspires to be a project manager can be one and this can be done quite easily. So the selection criteria are not rigorous, it is not selective. (Participant 39)

> I think the first thing I will do is I will tighten up the so call certification standard, or rather the certification criteria ok, but at the same time not imposing too much so call paper requirement. (Participant 05)

> And the PMP certification also … the entry criteria should be made tougher you know. (Participant 17)

Furthermore, Participant 35 commented that current PMI certification is not sufficient for legally designating or licensing who is qualified to practice project management. This is mainly due to the largely optional requirement for certification in project management, ranging from knowledge-based assessment to competency standards based on practice (Thomas and Zwerman, 2011).

> I guess the thing about project management, having the rights of PMP, those are little ways, but probably isn't tight enough today to accord the so-called more legal level of responsibility in the task. (Participant 35)

Participant 39, a project management teacher at a local higher education institution, proposed that there should be a minimum level of proficiency that project managers should attain in order to ensure that project management certification and licensing procedures are of

value and legitimate, just like those found in the major established professions, such as medicine, law and architecture.

> If you want to have a strong sense of identity, I think the boundaries have to be very rigidly defined and then you also do not want too much heterogeneity within the group. You want everybody to attain a certain minimum level of competency just like doctors and lawyers and architects. There is a minimum amount of training, there is a stringent criterion. So even the worst of the lot is not that bad. (Participant 39)

This research found that most participants (including Participants 06, 16, 19, and 45) believed that to enhance the project management professionalisation journey it is necessary to legally regulate the provision of project management services. Participant 06, Participant 16, and Participant 38 suggested that achieving regulation via certification and licensing would be highly complex.

> Should we regulate the PM industry? I say yes, but but but from the government's point of view is not so easy because if you do that, overnight suddenly you need to regulate and certify people to become project manager and if really really we don't have enough qualified project manager, then how? So it may backfire … (Participant 06)

> The journey (project management professionalisation) actually involve the environment, whether are they sensitive to how important project manager is, if they are not sensitive to it, the professional identity may not be there. I think that is the conclusion. The awareness and need to achieve this credibility as a whole … (Participant 16)

> But the one thing is that we would have to make sure that projects are being regulated, just like in the financial industry … (Participant 19)

> I think it is tough to have project managers to go to the level for it being recognised as a professional. It requires a hell lot of change in mentality and also the external environment for that to happen. (Participant 38)

> Different organisation look at project manager differently, so yes when the industry is matured enough to have this kind of professional bodies within it to regulate, I think it benefits the IT industry. Then it gives people the comfort level as well as meaning to go up the career path. So I think it is important both from employee and employer perspectives. (Participant 45)

4.4.1.4 Theme: Self and government regulation

Self and government regulation refers to project management practitioners, professional associations and government working as regulative agents that directly decide who is or is not allowed to practice project management. Although regulating who is qualified to practice may be very complicated, Participant 06, Participant 13 and Participant 19 indicated that

regulation is necessary in order to advance the project management journey towards professional status:

> Should we regulate the PM industry? I say yes … (Participant 06)

> I hope so (project management being regulated). Because when the companies are spending millions on a project, probably that makes sense. (Participant 13)

> But the one thing is that we would have to make sure that projects are being regulated … (Participant 19)

Participant 08, a project manager in the consulting industry, added that it is a project manager's social responsibility to self-regulate by advising peers on the importance of ethical project management practices:

> If I know someone, even my good friends who are acting against the (project management) code of ethics, I would at least warn them. You are not following the ethics as mandated, you may probably lose your (project management) accreditation. (Participant 08)

Participant 34 pointed out that the journey to self-regulation could even have a positive effect on society or public interest, as is the case with protection of the confidentiality of patient information via self-regulation within the medical and dentistry professions.

> So that is why you find … doctors, dentists they become professions. Because of information secrecy, there is a need to self-regulate … and society allows this self-regulation. (Participant 34)

Some interviewees (e.g. Participants 06, 13 and 21) stated that the professional project management associations should play a bigger governing role in regulating and representing the collective voice of professional project managers by promoting awareness among companies and society at large about the importance of governing the practice of project management.

> Target the MNC (multinational corporation) first, make sure the MNC big companies understand the value of PMP (PMI certification), so the next time they employ project managers, make sure they have this PMP in their recruitment criteria, I think the rest will follow. (Participant 06)

> But to make more public and more awareness, probably they can do some regulation change and also with the PMI body to say that any projects that are a million over [in value] has to be accompanied with a certified professional project management people to help handle in this particular project. Probably that may give a special sort of recognition … (Participant 13)

> But companies now are seeing the value (of certified project managers) but the Cs levels (upper management levels) don't understand it. So as a PMI chapter, they (the project management professional associations) need to educate all the Cs …

> so that they understand that why they need a certified project manager. (Participant 21)

As for government regulation, such legal regulation initiatives employed by the state to protect the public confidence are associated with the power and market model of professionalisation theory; however, several research participants (Participants 05, 08 and 26) expressed that unless it is necessary, it is unlikely that the government would step in to independently regulate the current practice of project management. Participant 06 and Participant 26 offered project safety, reliability concerns and impact on society as compelling reasons for government to intervene.

> If you based on Singapore's context, chances are it (governing of project management) is not going to be initiated by the government. But I foresee that the government may come in sometime later if there is such initiative. (Participant 05)

> I don't think government would actually have that kind of recognition for project managers but then going forward, you are going to look at things to happen in a very professional way and the quality is going to be a very key factor. (Participant 08)

> The government will not take a role at this current moment. Because the government will step in to regulate, like an engineer, architect, law, doctors, when whatever these professional do, will affect lives … When it will have tremendous impact on society. (Participant 26)

> I think it really depends on the government. Do they see that if we have half-past-six people running projects, is it really a concern, do you have a lot of safety accidents, do you have a lot of sub-standard work … (Participant 06)

Participant 06, Participant 13, Participant 15, Participant 22 and Participant 19 explained that the large amount of money spent on projects and lost due to failures and delays should necessitate government regulation to, for example, protect the security and privacy of national electronic healthcare record implementations.

> My personal view is it should change but how much you can change is really depends on whether the government want to regulate it. (Participant 06)

> Yah. It's a support from the government, to, you know, to come out with some sort of a regulation maybe. But to make more public and more awareness, probably they can do some regulation change and also with the PMI body to say that any projects that are a million over (in value) has to be accompanied with a certified professional project management people. (Participant 13)

> So the question is also I guess what most common to look at is what control you already had. And do we need to add any specific, erm… control on a project manager level. So these are the thing that we need to look at and see. (Participant 15)

> Unless you unless you… you have ... have it regulated la. Alright, like the case of a doctor in a medical profession. You can't call yourself a doctor unless you have that, you know, qualification. Yeah qualification and so on. (Participant 22)

> Tough question. And it's very subjective as well, you know. I can't see that (regulation) happening in the near future but to be honest in the long term, I would like to see it happen. But I do acknowledge that, you know, millions are lost in projects because they are, you know, project managers who failed to manage it well. So I do see a point there, you know. But how it will come about and all that, I'm not too positive. (Participant 19)

4.4.1.5 Theme: Cost overheads of professionalisation

The cost overheads theme highlights the financial considerations associated with the professionalisation of project management practice and maintaining its professional status. One interviewee (Participant 31, a managing director of an IT consulting organisation) even termed project management a very 'vague profession' because of variations in practice among organisations. This makes it a challenge to manage, which requires skills.

Participant 02 and Participant 26 agreed that a significant monetary investment would be needed both for individuals and organisations—for individuals because to obtain and maintain full professional status they will need to continuously update and upgrade skills, and for organisations because some of them would insist on project management certification for the person who would run the projects for them. Participant 22, currently a project manager in the IT industry, highlighted that this would certainly impact small- and medium-sized projects, due to the cost of obtaining the services of professional project managers.

> I guess the certification process needs to be changed a little bit … They can make it cheaper … because it's so damn expensive. (Participant 02)

> There is no available database on (local) project managers. So if they were going to hire a lot of … expatriate project managers, it cost too much to relocate them. (Participant 26)

> Then in that case, if if if you do that (implement licensing for project management), then only very few projects can afford project managers, right? So so if you look at all the smaller medium size projects … (Participant 22)

Furthermore, Participant 32 and Participant 48 thought that some form of insurance against legal liability would also be required for carrying out professional project management services, as evidenced by malpractice costs in medicine.

> Then the question I have is the project managers out there, are you prepare to stand up and get sued because you have the same ecosystem like the doctor, they have to take a risk. (Participant 32)

> So before anyone starts on any project, they would buy insurance to ensure to protect against malpractice … Do you want to have a blanket? Err … literally a security blanket err … which dampens, you know, the emergence of a particular profession err … or err … in fact err … increase the cost of such a profession operating and therefore passing on to consumers. (Participant 48)

Other interviewees (Participants 02, 31, 45 and 46) responded to queries about the challenges of project management practice by highlighting the magnitude of skills and competencies a project manager needs and the complexity of activities involved in a typical project. Therefore, understanding the challenges of project management practice, such as through the interviews in this study, is important for understanding cost overheads associated with the professionalisation of project management practice and maintaining its professional status.

> Project management is a very vague profession I would say that. It pretty much varies from organisation to organisation. (Participant 31)

> But I think that's a bit hard to apply to project management because; one, it depends on which industry you are in; two it depends on the situation you are in ... I think for project management it's a bit different. There are certain core rules you need to have a firm understanding of that. But for us, we have a Swiss knife. We pick and choose which tool is appropriate and that's also a pro and con as well because it spawns a lot of different processes. In one organisation I've been in they have too many processes ... You ended up with very diversified process. But at the same time, you can and you will restrict creativity and how a project manager does his job if you have too rigid a process because like we are different individuals, you and I. I might prefer to do it in a certain way, you might prefer to do it another way. (Participant 02)

> I think it's different project call for different aspect of skills to come in; so it's basically a combination of skills; some project demand more hard skill than soft skill, some projects demand more soft skill than hard skill and it varies so and every project is different, doesn't mean that last project you manage is [as] successful(ly) [as] the next project. You are going to be equally successful because basically you have different people, resources, different stakeholders; you have different everything. (Participant 45)

> It depends on the complexity of the project he (project manager) managed. If you are totally a stranger to the engineering or construction industry, then many things you have got to learn. (Participant 46)

Education makes up part of the cost overheads; however, some research participants (Participants 9, 13, 15, 21 and 36) agreed on the need for continuous project management training and relevant skills education in order to deal with the increasing requirements of complex projects. They are also necessary to respond adequately to socio-economic challenges and rapid technological advancements within the project environment.

> Yes , yes (the need for proper training), ok some of locations like Citibank or IBM. As a project manager you have to be certified, otherwise you cannot run the project. (Participant 09)

> Probably over the time, next to five to ten years, even from the IT industry, where you may not be able to catch what's happening. The technologies rapidly changes, it's very tough too. But again, probably we have to continue training process. (Participant 13)

> What is happening is if you look at the trend of project manager, project management are generally managing more and more complex projects. That means there are a lot of different elements that are being added into their discipline. (Participant 15)

> Project manager is like a company director. You are running a company but in a smaller scale as a project. So you need to know about financial but don't need in-depth. You need to know about human resource … So the skills set must be something like a company CEO or company CIO type of calibre to run a complex project. (Participant 21)

> Because a lot of times, PMs [project managers] operate alone. They usually don't have bosses who can guide them right and most of the time they are lacking a lot in mentorship. So I guess an extension of the certification program would be to do this sort of mentoring, focus group discussion. I think that would really help to bring up the level of profession. (Participant 36)

Another challenge facing the professionalisation effort is the need for domain and business knowledge. Several research participants (Participants 08, 37, 38 and 41) explained that domain knowledge is important for project work in industries such as construction, engineering, and healthcare.

> No, without actually proper domain knowledge, I don't think I will be a good project manager in a construction industry. (Participant 08)

> But certain projects you do need to have the domain knowledge; otherwise you won't know when something is going to go wrong … So if you have the domain knowledge which helps you to manage those risks … (Participant 37)

> I didn't come from a healthcare background. Stepping into healthcare background where, it is a very deep learning curve for me … So I think one key important thing for the person to recognise you at least that applies to healthcare environment, is the domain knowledge … (Participant 38)

> Well I guess it is just more than domain knowledge. It is also about really in-depth knowledge. For example in the construction (industry), you really have to be a construction engineer to understand what it takes to build something for example. (Participant 41)

Participant 04, a construction project manager with 18 years of experience, stressed the importance of engineering domain knowledge for project managers in the civil engineering industry.

> In civil engineering because we are dealing in engineering industry, to be an effective project manager I would think he should have minimum engineering background. It's quite important to have an engineering background but being very good in engineering does not of course translate into being good managers. (Participant 04)

Several interviewees (Participants 20, 14, 22, and 31) even stated that it was essential to have business knowledge.

> Because any project, the key element is basically risk management. So the risk moderating and accessing the rest. So to some extent, it comes with experience understanding of that knowledge area or that business area. (Participant 20)

> And also having the business knowledge and managing the stakeholders. That's what I see a professional or a true definition of a project manager. So, like a CEO of any organisation if you noticed. (Participant 14)

> But the thing of course is really to be an effective project manager, it's also important to know the business part of it, the domain part of it as well. Meaning that if you're a project manager of a healthcare system, you cannot be totally ignorant about the business requirements or the business knowledge. You need to know that. And I think the same applies if you're in the banking for example. You work in the bank, if you're a project manager of a current account system let's say, you need to know the business of it. so that will help you to be a more effective project manager. So my point is that for project manager it helps is important for you to understand the business as well. (Participant 40)

> One thing I would be doing is. I will be assigning or ask him (project manager) to work with business. That's really important. So the most important thing is work with the business, understand what exactly the business wants. (Participant 31)

Others (Participants 22 and 26) highlighted the importance of real-life work experience.

> Well a PMP certification definitely … gives you the theoretical background, alright, that a project manager needs. You go in and, you know, it is through all the knocks that, you know, you pick it up. Alright, but that alone does not, is not sufficient, it has to … be coupled with experience. (Participant 22)

> A lot of people are very eager to be certified. So try to … leap frog. But there is no shortcut to learning. No short cut. There's no, there must be a reason why we insist that people who take the PMP (certification) must have many years of (practitioner) experience. Some years (of) experience. Similarly for taking a master in project management course or what, you must minimum have some working experience. You can't just fresh graduate go and take, don't understand anything. (Participant 26)

The consequences of increased overheads arising from the uncertainty and difficulty in the journey of project management practice towards professionalisation are profound. Likewise, there is also increasing recognition that, in line with most new knowledge occupations, project management is an organisationally bound occupation, as mentioned by

the participants. Participant 24 succinctly summed up the feelings of project management practitioners towards the multifaceted nature of project management practice:

> It (project management) depends on industry, depends on customer, depends on the situations; depends on the amount of interrelationship to take and the skill set required. All the things will vary and the solutions depend on the situation, it is not a fixed concept … it is still evolving. It is very dynamic.

4.4.1.6 Theme: Practitioner name or title

A practitioner name or title indicates having monopoly of or gaining control over the use of the occupation name or title. It is considered essential to create an occupation that can lay claim to professional status as posited by attribute and process models. According to Participant 05, a software quality assurance manager in the consumer electronics industry, with 10 years of project experience, there are many project managers by way of title in his organisation, but not all are actually performing project management roles:

> Currently in my company, I think there are a lot of so-called project managers by way of title … whether they are performing role of project managers, I would say probably not all of them, maybe a handful of them, yes.

Participant 12, with 6 years of project management experience in the healthcare industry, felt that use of the project manager title must be controlled:

> Title of a project manager, right, it must not be too loosely used …

Participant 17, an IT project manager in the banking industry, suggested that such unregulated use of the title would devalue the project manager branding, making it difficult to create an occupation that can lay claim to professional status. Participant 21 and Participant 31 shared their opinion.

> That is very difficult because somewhere you have project managers who are not project managers but for the sake of it they are being given a role called project manager. (Participant 17)

> Okay if project management you looked at now, I find that there are few types of project managers. The name is too generic... Too generic. Because everyone can claimed them doing a project. (Participant 21)

> I believe in project manager who has the responsibility, authority and who is managing end-to-end of that project... So title should be given to those people who are doing the project management work, who is end-to-end project management. (Participant 31)

Some research participants attributed the hiring organisation's use of the practitioner name and title without regard to qualification to attract or retain top talent. Participant 05 and Participant 45 noted that there seems to be a separation between the project and manager title.

> One of the main reasons is to attract and reward, I don't think there will be people interested just being a project coordinator or just project engineer, giving them project manager title will look better … (Participant 05)

> Some organisation that who doesn't differentiate or there is no need to differentiate this different aspects of project manager skillsets and know how. If I am a small setup I need to hire somebody, fine, I hire somebody and call you project manager, better still to make you happy I call you Project Director and I pay you IT executive pay, well the thing is I make you happy. (Participant 45)

A poor fit between the advertised role and actual role also gives project management practice a bad name, added Participant 08:

> Yes, yes definitely I agree because even today there's a perception by the developer that project managers are person who does not know anything and then for lot of reasons actually some of the project managers also give an impression because the way they do things.

Participant 21, a project manager with 18 years' experience in the consulting service industry, explained that this is due to the lack of a clear definition for the term "project manager" by hiring organisations. The research results highlighted that the misuse and unregulated use of the project manager title were mainly due to the separation between the project and manager title, a poor fit between the advertised role and the actual role and the lack of a clear definition by hiring organisations. This has negatively affected the professional status of project management practice.

> Because people want to have a bigger title (laugh) so some people are engineers, once they are in charge of small little projects they called themselves project manager … which they are not equipped with the right skill set to be a project manager … I think the industry doesn't have a good definition of a project manager. (Participant 21)

Generally, research participants felt very proud of the project manager title and were comfortable being associated with the project management area of work. In addition, the ability to control and capture the project manager title would help to enhance professional identity formation. Participant 12 reported that she pursued the project management practice because of the portability of project management knowledge across multiple settings:

> I think project management is something that can be applied no matter which company I go to and that is the reason I picked up project management.

Participant 14, a project manager with some 13 years of experience in the transportation industry, felt that being a project manager gives a person a higher sense of prestige, status, and image:

> I think I like to be a project manager because it is a pretty cool title to have.

Others, including Participant 40, who heads a technology department in healthcare services, believed that the project management role is interesting because of the multifaceted responsibilities of project management practice. Participant 33 and Participant 45 felt that the title should be given to those who are qualified.

> So I think a project management role in my mind is a multi-designated role for an IT person. You managed the schedule, budget. You manage people, you manage the people here could be the technical people, the programmer, could be the vendors as well. You also learn how to manage vendors. You also need to manage the infrastructure for example. Are the networks ready, are the servers ready, are the PC ready that sort of things. So you need to know how to manage those as well. So in my mind I think a project management role is interesting … (Participant 40)

> I mean in essence like what I said, nobody rightfully can be called a project manager unless he has effectively, from an IT perspective been exposed to multiple functions with at least some years of experience. (Participant 33)

> I think just like any other title in an IT you got infrastructure manager, you got application manager, you got project manager. Now the project manager title probably goes to someone with some years of experience in project management and probably with some basic PM project manager credential and experience so again it's where and at what place in what organisation you use this term. (Participant 45)

To sum it up, research participants in this study felt very proud of their title as project manager and were comfortable being associated with the project management area of work. These professional identity formations include a sense of prestige, status and image about the project management practice. Many are attracted to project management practice because of the deemed portability of project management knowledge across multiple settings, as well as the many interesting project management roles, such as "a leader, administrator, entrepreneur, facilitator, arbitrator and mediator, liaison, and coordinator" (USDIBR, 2007, p. 7).

4.4.1.7 Theme: Field of operation

Field of operation refers to a negotiated statement of the area of an occupation's practice or, in other words, the boundary of project management practice. According to Participant 05, there are many practitioners in the field of project management who do not have proper certification. Similarly, Participant 33, with more than 20 years of experience leading the technology departments in both the healthcare and banking industries, reiterated that most project managers that he came across were actually ineffective and lacked proper project management qualifications.

> They call themselves project managers, they do not have certification and they are not able to carry out their work very well. (Participant 05)

> Most project managers that I come across are actually not that effective. Actually they are not qualified project managers but yet they call themselves project managers. (Participant 33)

Participant 06 compared the project management profession with the engineering profession:

> Fortunately or unfortunately the project management profession is not regulated in Singapore. It's not. Not like my fellow engineers in the electrical or in the electronic industry where there is some sort of government policy or regulation dictates that hey certain submission need to be signed by a professional engineer. And because of that the statutory requirement find that those people who hold such a title or qualified under such exam, they will definitely exercise more careful because if anything goes wrong, they are liable for professional negligence. But for project manager we don't any equivalent statutory requirement in Singapore.

In addition, Participant 21, an experienced project manager in the consulting services, and Practioner 23, both suggested that the career paths for project management practitioners are often poorly defined.

> So the project manager's role is not that well defined … I find a lot of project management people they are more coordinators or supervisors. They don't resolve issues, resolve problems which I find that as a professional project manager, to be the highest. (Participant 21)

> I told to my HR, I told them that okay look, in here in [company] you have only project manager, that is all ... What is after project manager what is before project manager? How can people see their career path to become a project manager... (Participant 23)

Participant 08, a project manager in the electronics consulting industry, supported this claim, saying that he only spent half his time performing project management tasks. Participant 12, a project manager in the healthcare consulting industry, spent her time juggling being a project manager and a project member, and Participant 14, who manages IT projects in the transportation industry, said that it is the norm for an IT project manager to handle multiple concurrent roles. Participant 29, a project manager with more than 10 years of experience, also in the transportation industry, concluded that project managers often work long hours because of the various areas that must be coordinated in line with the multifaceted responsibilities of project management practice (Ahsan et al., 2013, USDIBR, 2007).

> So right now my job scope is like 50% project management and another 50% till the business analyst role … I have to wear many hats. (Participant 08)

> Beside the role of project manager, I also go down to the extent to try clean up all the data … So it is like I'm doubling up as a project manager and also part of the project team … (Participant 12)

> But in the IT profession, in the project environment, you play dual role … (Participant 14)

> That's why project manager worked long hours. During the daytime you coordinate people. Night time you do the coordination job and … (Participant 29)

Many research participants attributed the difficulty of practising project management on a full-time basis to the different types of organisational structures, including functional structures, divisional structures, and matrix structures. Participant 32, an experienced head of a corporate communications department in the healthcare industry, explained that because of cost constraints, project managers often do not fill that role full-time, but are often assigned project management responsibilities over and above their regular jobs:

> In many organisations … most of them because of cost reasons will say, ok, you are doing this day job, you have to part-time as a project manager as well …

Participant 33, who heads the technology department of a healthcare organisation, reiterated that small- and medium-sized organisations were less likely to employ professional project managers because of project resource limitations:

> If you are in the small medium enterprise, you're probably one leg kick in doing everything, and you do whatever things to make things worked, and because the company is not big enough, they are not matured in developing a full-fledged project manager. So you go through a school of hard knocks time. So if they run project, at the best of their knowledge, at their best effort basis …

In addition, Participant 46, a professor of information science with extensive project experience in electric power and higher education sectors, noted that the matrix and similar organisation structures might impede the allocation of full-time project resources:

> It depends on the structure. If they are like the matrix structure then half the time they are doing projects. And sometimes you can be like playing different roles. You could be a project manager in one, project team member in another and so on …

Participant 19 added that in his organisation's matrix structure, there are no full-time project managers:

> In my organisation doesn't naturally have a real (dedicated) project manager. You know it's kind of like a matrix organisation, so where you're part of a functional team while you still running project.

Therefore, the research data analysis makes a convincing argument to delineate the boundaries of project management work and the career paths for project management

practitioners, as these are central to how project management is being recognised as a full-time professional practice.

Because of the significance of project management practice in an organisation, most participants agreed that project management should be practised on a full-time basis. Participant 05, who works in the consumer electronics industry, felt that project management is worthy of being a full-time practice so as to distinguish it from other disciplines of work, and Participant 31 referred to the expansion of the project manager's role in the past decade.

> I believe they are doing the work full-time otherwise they won't be called project managers … (Participant 05)

> Industry of business expects more now from the project manager if you compare with the last 10 years back and now... So, project manager's role has been expanded now. (Participant 31)

Participant 41 and Participant 46, both experienced project managers, pointed out that more established, larger organisations do have dedicated full-time project managers.

> Well comparatively let's say in more established MNCs. They tend to have more specific roles and they realised the need and the importance of having good project managers and having standardised project management methodology to run project successfully. (Participant 41)

> Some companies do have full-time project. They have so-called project office and project managers to focus nothing but just managing … (Participant 46)

With the underlying assumption that career paths have direct implications for the formation of an individual's professional identities and engagement in professionalisation initiatives, this research study suggests that it is essential to establish the boundaries of project management practice as full-time work with distinct professional characteristics (identity, professional qualifications and career paths) if project management is to be recognized as a profession and not just a part-time role.

4.4.1.8 Theme: Personality traits

Personality traits refer to personal characteristics, enduring patterns of thought, emotion, and behaviours that are stable over time and affect the way an individual views himself and the environment (Funder, 2001, Shorbaji, Messarra, & Karkoulian, 2011). Almost all research participants (94%) agreed that project managers require more than just technical competencies. Human-related competencies and soft skills are also necessary in the management of projects. As is evident in this research study, personal characteristics, soft skills, and people-related competencies (e.g. being people-oriented, resourceful, interactive,

effective, and passionate) do contribute to professional identity and can influence project outcomes. Project management practice can be generalised into the personality trait categories depicted in Table 4.7.

Table 4.7: Categories of personality traits essential for project management practice

Personality traits categories	Number of participants	Percentage of participants
Communication skill	18	26%
Organisational skill	16	24%
People skill	16	24%
Others (non-specific) skill	13	19%
Presentation skill	3	4%
Writing skill	2	3%

Communication skills, which involve a project manager's interpersonal ability to interact with others, were perceived to be the most important personality trait for project management practice (26%). A significant number of research respondents cited as the other personality traits necessary for project management practice, people skills (24%), which includes teamwork, mentoring, influencing, and people management; and organisational skills (24%), which connotes the ability of a project manager to lead and visualise the project as a whole (El-Sabaa, 2001). These top three skills and competencies accounted for almost three-quarters of all reported personality traits. Participant 03, a database analyst with about 7 years of IT project experience and who currently works in a healthcare organisation, stressed the importance of a project manager being able to communicate well with various project stakeholders. Participant 31 shared the same opinion on the importance of soft skills. Similarly, Participant 06, who currently heads the operations team of an electronic manufacturing organisation as vice president of operations, said that a project manager must be a friendly and outgoing person who is comfortable communicating and interacting with people.

> Communication is very important, currently also I feel like it has to be communicated to all the stakeholders. So that's where the communication is very important. (Participant 03)

> What I believed is for project management is about the soft qualities... Second thing is, 80% of time you are communicating it. Ok, 20% is you have to do analysis and know the coordination of other things. So what I'm looking, the most important thing is soft quality. Secondly thing is the communication skill,

> leadership skill. Ok, that's what I'm going to look at. And this is not based on judgement. (Participant 31)

> A project manager must have this prerequisite of people skills. … if you get someone who is introvert, do not know how to interact with people, very very difficult to be a project manager. (Participant 06)

Participant 07 and Participant 08, who both hold PMP credentials from the PMI, suggested that a project manager must possess a mixture of personality traits, including leadership skills, people-oriented qualities and passion for project management as a career option.

> So human part of it, risk management, leadership, all these are soft skills that project managers should have. (Participant 07)

> Definitely an introvert person, project management is not something for him or her … have to be passionate about what they are doing. (Participant 08)

Practising project managers Participant 14 and Participant 23 both felt that fundamental people skills are very important because project management practice requires teamwork, planning, collaborating, and negotiating with counterparts and clients. Participant 36, with more than 20 years of experience in a variety of project roles and who now leads an advisory practice of IT governance and management, concluded that people-related or people-oriented competency is one of the most important personality traits a project manager must have because of the need to negotiate and interact with different project stakeholders.

> To be able to put a project together, or to run a project, you must be able to work together, to be able to work across all departments, across all organisations. And then those are the skills that are required. (Participant 14)

> It should be from the passionate way of looking at things… Because ultimately project manager is about serving people. (Participant 23)

> And certainly soft skill is one area where you need to boost it up. And because project manager, besides doing all these technical scheduling and all that, you are basically dealing about people. (Participant 36)

As illustrated previously in Table 4.7, almost a quarter of research respondents agreed that organisational skills (referring to the ability of a project manager to lead and visualise the project as a whole) were essential for project management practice. This suggests the importance of focusing on project managers' leadership training and development. According to Participant 14, an experienced project manager in the shipping transportation industry, a project manager needs to possess organisational skills to lead and visualise the project as a whole. Participant 04 suggested that the project manager who is keen to learn could perform the role.

> A project manager foresees the roles ahead, be able to manage risks, be able to identify risks, be able to lead a team, be able to manage the projects and plan the project you know, looking at budgets, looking at what resources required … (Participant 14)

> So first and foremost I think the person should actually be keen to take on that role (as a project manager), he should be teachable, he should have that interest to learn and he should be given opportunity to learn and be groomed, then I think he can fit into that role. (Participant 04)

And Participant 31, who manages a local software services consulting company, stressed that a project manager must have the passion and drive to lead, because this influences the outcomes of projects.

> What matter is, whether this gentleman has got passion … Ok, certainly who has got certain drive, leadership skills … So if I don't get a good project manager … I'm not able to deliver what I actually promised to the client, so I'm failing my client and it is affecting my business. (Participant 31).

In summary, Research Question 1 explores the project management practitioners' perceptions of the activities and strategies necessary to obtain professional status in Singapore. Although there were no shared perspectives on the construct of project management professional identity, the participants articulated different aspects of the identity constituting the sum of its parts. The findings from the research participants revealed eight themes or main areas that participants felt were important in the construct of project management professional identity.

4.4.2 Motivation to attain professional identity

Research Question 2 addresses the current gap in the study of professionalisation: the inadequate exploration of an occupation's members' motivation for professionalisation, as described in Chapter 2. The research participants were encouraged to express their views on the importance of attaining professional status, their confidence in achieving it, and their motivation to commit to this journey.

Their perceptions of how hopeful and confident they are about professionalisation reflect whether they think it is worth gaining professional status or if they think it is merely an occupation. Furthermore, the professionalisation effort has serious implications for the way project management is being practised and requires concerted effort by members to be consistent in their practice.

In the interviews, project managers shared their perceptions and opinions about the journey towards professionalisation. As many as seventy-one per cent of research participants

were confident that project management practice can emerge as a profession and is on the right track towards professional recognition.

Most of the participants (Participants 05, 07, 10, and 23) believed that, according to a lay definition, project management practice was already a profession.

> I am totally saying that project management is a profession … (Participant 07)

> To certain extent I do agree there are some achievements in terms of project management practices, because at least in the project team people are more focus on what needs to be done in delivering the project as compared with the past. Individual stakeholders in the project team are also more concerned about their deliverables. (Participant 05)

Both Participant 05 and Participant 10 felt that, nowadays, with the help of systematic and organised sets of processes (project management methodologies), project managers are more focused on meeting their project deliverables. Furthermore, the PMI's maintenance and enforcement of PMBoK is a positive step forward by a leading project management association.

> Project managers themselves, to have a professional body or a professional recognition, again I mean with the right set of requirements being set, that would be a good thing to have... (Participant 04)

> PMI … it makes sure that you have those right skills or right methodologies; you are exposed to that level of knowledge before you are endorsed as PMP. (Participant 10)

Interestingly, Participant 23 (who is proud of being PMP certified and associated with project management practice) felt that a project manager's professional success is related to the value of the project.

> Yes, to me it is a profession. And to me of course a project manager value or success is related by the value of their project. So yes, I do believe that project manager is a profession that is something we are to be proud of. Of course the society or community may not think too highly of project manager most of the time … to me this is my profession I am very proud of doing it. I got my PMP; I got PMI so I know I'm there. (Participant 23)

Project management is advancing in many ways, such as the rapid growth in membership of project management professional associations (Muzio et al., 2011) and the rising number of training programs and certifications for project management (Hällgren et al., 2012), to the extent that some researchers feel that "it is only a matter of time before project managers are held legally accountable for the outcomes of projects" (Thomas and Zwerman, 2011, p. 273). Table 4.8 provides a breakdown of the reasons why many practitioners were

optimistic about the journey towards professional recognition. In Singapore, the membership grew from 170 in 2000 (PMI, 2016b) to 1850 in 2012 (PMI, 2016a).

Table 4.8: Reasons for optimism about professionalisation

Reasons for optimistic journey	Number of participants	Percentage of participants
Already a profession	10	29%
Regulate practice	10	29%
Standardisation/quality	5	15%
Distinction/qualification	4	12%
Accountability/credibility	2	6%
Control title or name	1	3%
Create awareness	1	3%
Differentiate from others	1	3%

Perceptions that project management was already a profession, the need to regulate the practice, and the requirement for standardisation/quality of the practice accounted for almost three-quarters (73%) of the contributing reasons as to why project management practitioners were supportive and optimistic about the journey towards professionalisation. As mentioned earlier, research participants felt that the project management practice was already a profession because nowadays project management practitioners are more knowledgeable, focused, and better exposed to employing systematic and organised sets of processes (project management methodologies) for meeting project deliverables.

The calls for regulation and standardisation / quality control were related mainly to the need for laws and guidelines. The remaining contributing reasons practitioners believed professionalisation were necessary were to distinguish the qualified from the unqualified, to ensure a practitioner's accountability to his or her work, to control the use of a practitioner name or title, to create awareness of the importance of governing the practice, and to differentiate project management from other practices. This mirrors the journey of previous professions, such as the professionalisation of American lawyers between the 1870s and the 1950s with the formation of local, state, and national bar associations to regulate and control the practice of legal services (Abel, 1986); and the introduction of the 1858 Medical Registration Act to unify the various disparate general practitioners, physicians, and surgeons via a single register, self-regulation, and a system of formal medical education administered

and controlled through the British General Medical Council (Saks, 1999, Waddington, 1984, Waddington, 1990).

Although the majority of interviewees were optimistic about the professionalisation of project management, some research participants sensed that the path to professionalisation would require substantial investment, resources, time, and effort by project management practitioners and professional associations in order to accomplish this goal. These include supporting the exclusive claim over an esoteric body of knowledge for project management that is essential for good project management practice, representing the collective voices of professional project managers to govern the practice of project management, and engaging project stakeholders to increase awareness about the importance of project management activities. Some research participants (Participants 14, 21, and 31) highlighted as potentially slowing down the professionalisation journey, the lack of maturity and awareness of local project organisations and management regarding the importance of project management practice.

> Years to come, probably yeah. I would think so. I would think that as organisations are more matured, probably. I think in Europe, in the US, I think probably it will be a lot more mature than the organisation here, you know, in appreciating project managers. (Participant 14)

> But companies now are seeing the value (of certified project managers) but the Cs levels (upper management levels) don't understand it. So as a PMI chapter, they (the project management professional associations) need to educate all the Cs … so that they understand that why they need a certified project manager. (Participant 21)

> I think it's longer to go. Certainly that particular maturity in terms of the product and the basic principle of the project management. It's a long way to go. (Participant 31)

Furthermore, Participant 35, a chief information officer (CIO) of a healthcare organisation, felt that the wide scope of project management knowledge and practice would require more time and effort in order to succeed. In the same vein, Participant 06 felt that the lack of project management regulation in Singapore could be beneficial for project managers.

> I think it is going to be a bit difficult, not impossible because unfortunately I guess project management is simply so wide. So trying to get a handle on it to put in place, professional certification … literally you have to take it down the pathway of a doctor. (Participant 35)

> Ya. Fortunately or unfortunately the project management profession is not regulated in Singapore. (Participant 06)

On the other hand, there are project management practitioners who are against the professionalisation of project management. Some interviewees wanted to protect their autonomy and rights over their practice without the need to become accredited, and others were afraid of the consequences associated with professionalisation. As is evident in this research, twenty-nine per cent of the interviewees were pessimistic that project management practice would succeed in gaining professional recognition. Participant 34, an IT Manager with more than 20 years' experience, felt that globalisation and commercialisation present significant challenges to the successful professionalisation of the occupation.

> The reason is that the current trends, globalisation, commercialisation and so on, work against having a defined profession. (Participant 34)

Similarly, Participant 35, who has more than 20 years' experience in the healthcare industry, and Participant 20, even questioned if it is necessary.

> At this moment I guess that's what I see. Can it be a profession I guess anything can be a profession. The question is, is it necessary? (Participant 35)

> But project manager to me they are just position only. It is like a manager. So is that they have, some people are managing diversity, some people is managing operation, some people is managing project. I don't see at this, I don't see that why people would like to be project manager all the time. (Participant 20)

Table 4.9 provides some insight into the reasons for the lack of confidence.

Table 4.9: Reasons for pessimism about the journey

Reasons for pessimistic journey	Number of participants	Percentage of participants
Too complex	7	50%
Just a role/no special function	5	36%
No added value	1	7%
Government will not regulate	1	7%

The complexity of the practice and the perception that project management is just a role with no special function are the top two reasons why some practitioners are pessimistic about the journey towards professional identity, accounting for eighty-six per cent of poor perception of the journey. Complexity refers to the perception that there are too many requirements to achieve professional identity (Participants 25 and 38); the dynamic nature of project management, making it difficult to make progress in its professionalisation (Participants 14 and 24); and the challenges of handling global projects (Participant 31).

> They know everything but they feel a little bit hard to practise all these stuff. See, when you practise only then the professionalism will come, you take part of it, it won't. (Participant 25)

> Personally I don't think so. I think it is tough to get to have project managers to go to the level for it being recognised as a professional. It requires a hell lot of change in mentality and also the external environment for that to happen … (Participant 38)

> I don't think there would come a day that we'll see, you know, at least in the Singapore context, to see that project manager are attaining the same level as what a doctor is, what an accountant is, what a lawyer is. To be able to put a project together, or to run a project, you must be able to work together, to be able to work across all departments, across all organisations. And then those are the skills that are required. (Participant 14)

> It (project management) depends on industry, depends on customer, depends on the situations, depend on the amount of interrelationship to take and the skill set required. All the things will vary and the solutions depend on the situation, it is not fixed concept. And number of things in project management or project management area you can use it to a large extent, practices all over the world but … it is not saturated, it is still evolving. It is very dynamic. (Participant 24)

> For example, recently we have been providing service to one of the banks. It's an Australian bank and they are doing implementation in Shanghai. It's Australian, ok, and they are doing in Shanghai, and they handling that from India. Australian culture, the way they operate, the way they behave and the way they kind of manage the project is different. But who is the recipient, who is the business, what is the main stakeholders, what are the Chinese culture? So we need to instantly approach with particular to China? No, because you have the Chinese culture, you have Indian culture and you are trying to keep in mind somebody is managing from Australia. So we need local project manager who understands culture and particularly in Asia Pacific region. Project manager must be culture sensitive. (Participant 31)

As for why project management practice is deemed a role with no specific function, Participant 17, who manages IT infrastructure projects at an offshore bank, expressed that project management is merely a transient role within the project organisation.

> But project management is not a profession. It is just a role. It is something which people will be doing some point in time and not necessary afterwards. I don't see project managers as being termed as professionals. It's just a stepping-stone. (Participant 17)

However, Participant 20, a supply chain IT program manager in the IT and services industry, insisted that project management is a leadership role—just like the management of diversity and operations.

> But project managers to me they are just position only. It is like a manager. So is that they have, some people are managing diversity, some people is managing

> operation, some people is managing project … I don't see that why people would like to be project manager all the time. (Participant 20)

Interestingly, Participant 23, a project manager in the consumer electronics industry, agreed that project management practice is a role with no specific function. Similarly, Participant 34, a qualified medical doctor, submitted that trends such as globalisation and commercialisation present significant challenges because project management is deemed to be a project-by-project position. Participant 23, however, conceded that the project management role is very important, as it is being adopted across a range of industries from IT to new media, as well as in the public sector and public–private partnerships.

> Project manager can then be a role if people want to think that project manager is a role. But then it's a damn important role … You need to project manager down there to ensure that the project is being managed properly. It is a role because we don't have a … a … a discipline that we are bounded to. But it is an important role. Just like CEO is an important role. I got no problem they don't want to call it a profession. (Participant 23)

> The reason is that the current trends, globalisation, commercialisation and so on, work against having a defined profession. Now if your regular mode of employment is on a project basis, some of them will be consistently doing the same type of project, some of them will move around because their skill set can be in multiple locations. That erodes profession as well. (Participant 34)

The remaining two reasons for pessimism about the eventual professionalisation of project management relate to the perception that local government will not regulate the practice and that it is not accorded any value.

4.4.2.1 Theme: Accountability

Accountability refers to a project manager's sense of obligation to his or her work. In this research, Participant 02, a program manager, felt that the current established PMI Code of Ethics and Professional Conduct provides fundamental principles of conduct to practising project managers.

> I think in the code of ethics, which they have right now, is good. Is a good start. In terms of processes, I think it is good to have a core guidance that you can leverage on. At the same time, you can pick and choose from that … (Participant 02)

> My professional ethics, I'm a professional and if I signed on that it's going to be me, in terms of like my professional career. That's what I am putting at risk. So there was with a project with New York economic development corporation. So I told them I can't do that and the (our company's) owner, who is also the CEO, was like very incensed. Right then, I said no, I can't do it. Because for that project we were [the] secondary vendors. The main vendor brought us in, so our owner wanted to get this [project] so that they can write [the codes], so they wanted me

> to give misrepresentation. So for this company I was also leading Singapore office as the PMO, plus also I am the lead Project Manager for this [project] … So I can't, with all conscience, do that. And I find it repugnant, because like they were like stabbing the first vendor. (Participant 02)

Participant 08 and Participant 21, both of whom work in the consulting industry, also stressed the importance of ethics in the professional practice of project management.

> Those (project managers) who are acting against the code of ethics, I would at least warn them … (Participant 08)

> Same as project management. If you want to be a profession, your ethics are very important. (Participant 21)

In general, research participants (Participants 02, 04, 06, 08, 15, 37, 45, and 46) agreed that project managers who were given full authority should be held liable for their errors and then project outcomes.

> I remember the Singapore Circle Line collapse at Nicoll Highway caused a lot of deaths. What happened at that point of time was the project manager was hauled to court and he was actually held liable, accountability. Do you think that that is something that should be applied to all projects. I mean, to tell the project the gravity of leading a project that it must be accountable to the fact that if I haul you to court you must be able to justify why you do the project this way and that way … I wouldn't agree whether that guy need be held accountable under court of law. But I mean as long as, I mean if he was negligent to that extent where he put people at risk then yes. But as long as he applied due diligence then he has discharged his responsibilities. (Participant 02)

> I remembered there was an incident in one of the construction project which is at the circle line near the Nicholl Highway where thing collapsed and people died. And in that incident the project manager was hauled to court and held liable for running the project and making decisions that causes that unfortunate event. So in that case the project manager was held accountable for it … do you think that if a project manager is to be held liable for the project he run, then not any Tom, Dick or Harry should become project manager if it's such an important job. And that there should actually be a licensing gatekeep to ensure that you know these project manager are the one whom we trusted to make sure everything runs fine should be actually licensed to do it. (Participant 04)

> I think it really depends, what you want the project manager to be accountable to. If you say that, hey! The thing happened because the project manager didn't report the problem, then yes; it is a lapse on the project manager. (Participant 06)

> Yes, any project manager in general if something has gone wrong, management has got every right to question you and if you are held responsible for that outcome, you will definitely bear the impact of it. (Participant 08)

> Three things I would fundamentally put for my manager. One is accountability in term of customer service satisfaction because we thought we would not get the business. The second thing is accountability to make sure the project to come on

> time. The third one is project is within the budget. These are the three main things. (Participant 15)

> I think if he's given the full authority, all the resources he need, definitely yes he also have to be responsible. But we know in project management that doesn't happen. Sometimes you don't get the resources, sometimes you don't have the skills set or people with the right skill, you are just given a project that you in an area that you are not familiar with ... So you have to manage it with the so call subject matter experts who may or may not tell you everything. You may not be given enough time, they will tell you the project is due yesterday which also happens. So in that aspect if you don't have control over those factors, then your accountability will be up to the level of highlighting those issues. So as long as you have highlighted it, yah, you have done your part. But to hold a person solely responsible even though he has no full control, then I think it's not right. (Participant 37)

> Now if you are a project manager in a construction industry you are fully liable for any injuries or any death because don't forget liability comes with one word, negligence and if people can prove that you are negligent you are liable so it is not just in IT but in every professionalism. (Participant 45)

> I think it depends. It depends on the situation. If he is the one who make the major decision and the decision backfires on him, of course. Ultimately the company's CEO is the one ultimately taken the responsibility. But he has got to take a good fair share of the responsibility. So it's how the company manages such responsibilities when it happens. Sometimes somebody has to take the rap. If you are working for a Japanese company, generally the top person will take it, regardless of you know, how many levels down make the mistake. Whereas other companies, the person who makes the mistake, the path stops at with him, and he's got to be accountable. So in some way I think … depends on the culture of the organisation. (Participant 46)

Furthermore, Participant 41, an IT infrastructure manager, stressed that this accountability should start upon the commencement of the project work:

> So I mean moving on as a project manager, once you agree that a project should be started, the accountability should start at that point of time. (Participant 41).

4.4.2.2 Theme: Emotional attachment

Emotional attachment refers to the project manager's commitment to an emotional relationship with his or her work. In general, research participants were proud to be associated with the project management profession because of the perceived status and the multifaceted and interesting challenges associated with project work (Participants 14, 23, and 40).

> But if you are talking about a hundred million [dollars] project, you're talking about projects that have to go live at that certain date, then I think someone has to have certain skills, then someone has to be groomed, has to be given certain steps along the way and be mentored, be led to that direction and rewarded and yah, to

> get there … I think I like to be a project manager because it is a pretty cool title to have. (Participant 14)

> Yes, to me it is a profession. And to me of course a project manager value or success is related by the value of their project. So yes, I do believe that project manager is a profession that is something we are to be proud of. (Participant 23)

> So I think a project management role in my mind is a multi-designated role for an IT person. You managed the schedule, budget. You manage people, you manage the people here could be the technical people, the programmer, could be the vendors as well. You also learn how to manage vendors. You also need to manage the infrastructure for example. Are the networks ready, are the servers ready, are the PCs ready that sort of things. So you need to know how to manage those as well. So in my mind I think a project management role is interesting … (Participant 40)

Participant 10 and Participant 26 both agreed that PMI organises very good project management–related seminars. In addition, Participant 10 and Participant 23 displayed their emotional commitment to the profession by often attending and participating in talks, conferences and seminars organised by PMI in order to improve their skills, thus reflecting the image of being knowledgeable in their profession.

> I think they are on the right track … holding conferences, seminars, getting speakers to speak up in seminars … Every seminar I go to, I get back some skills. I do get back with some skills, unless I am sleeping through the entire thing. (Participant 10)

> They (PMI) organise very good seminars ... The global PMI community is to provide education, to encourage people to be certified. To encourage more people to come forward, to be project managers. (Participant 26)

> But this is how I feel that I want to improve by attending some seminars, talks. But most of the time project manager will feel that this way is correct … (Participant 23)

4.4.2.3 Theme: Cost association

Cost association refers to the project manager's commitment towards his or her work because of the perceived cost of failing to do so or financial loss associated with leaving the profession. Generally, research participants acknowledged that project management entails a career progression for individuals involved in project-related work (Participants 28, 31, and 33).

> I started off … like most people as an analyst programmer for a couple of years and then become a software engineer and slowly move to a more senior position of a software engineer. After more than 10 years in software development and team lead I pursue some certification courses of project managements—CITPM and PMP. Thereafter, I tried to apply for some internal position for project

> manager and I managed to get an offer. Yeah, and that's how I progress from there. (Participant 28)

> Ya. Born with IT. So did my first job was as a humble programmer, I started with that. Then I moved to the other side. Ok, and then I moved to business analyst, and then I moved to project manager. And then I was a project, project and program director. And currently I have been managing the project management practice. (Participant 31)

> And in fact that the proper path to become a project manager should be one who has undergone at least or understand the functions of programming, system analyst … The path must go through must be through either IT operations programming, system analyst then you can become project manager. (Participant 33)

Likewise, both Participant 40 and Participant 46, who have more than 20 years of work experience, commented that project managers are expected to grow and learn on the job.

> A lot of project managers I've talked to they don't really get to attend courses. You have to learn on the job … there's part of it you learn on the job. If you are lucky enough you get a mentor to guide you. If you are not lucky enough you don't have a mentor to guide you … (Participant 40)

> Project manager education I guess started only recently compared to the whole history of IT. I don't know, maybe 20 (years ago, before that) you learn on the job. (Participant 46)

Participant 35 highlighted the complexity and uncertainty of projects that make the practice of project management harder and difficult to manage:

> Also it may well be the case where it is not for the lack of project management. But it is just that the amount of unknown and uncertainty in the IT project is beyond the ability of project management techniques to control for that level of attitude of change. (Participant 35)

Because project management is continually changing, it is important for project managers to continue with skills development and professional education, added Participant 45 and Participant 46:

> It depends on the complexity of the project he managed. If you are totally a stranger to the engineering or construction industry, then many things you have got to learn. (Participant 46)

> I think the one important aspect of a project manager is he or she must carry the attitude of continuous learning because like I said in any project, you go to the environment is different, the industry is different … (Participant 45)

However, Participant 07, Participant 28, Participant 30, and Participant 11 deemed continual skills development and professional education too expensive.

> If you try to go to the CITPM (Certified IT Project Management Program), the course is quite expensive … (Participant 07)

> The education for project management is definitely not cheap … (Participant 28)
>
> And the readings (PM body of knowledge) is quite expensive. Because my colleague wanted to buy and then she told me it was like 40 50 US dollars... Yah because she is not a member. And I was so shocked because I thought producing a book shouldn't be expensive. And secondly, who contribute? It's us. It's we all. (Participant 30)
>
> PMP (certification) is good but you have to study... But for some training centre, it's very expensive... I know about this school and I want to attend it. So, I have to spend a lot of money because by myself without getting from my supervisor, you see. So, it is very expensive to take this kind of exam... (Participant 11)

Because of the perceived high cost of investment and the progressive nature of a project manager's career, project managers were somewhat inclined to stay on and remain committed to their profession, at least for those who derived job satisfaction (Participant 23) or who received organisation's support (Participants 14, 06, 10, 25, 28).

> So I don't think about what other people think, to me this is my profession I am very proud of doing it. (Participant 23)
>
> I think yah, in my company right now, I think the maturity of it is a lot better … probably one of the better companies in Singapore, you know, that we promote the roles of project manager. (Participant 14)
>
> Now yes (enjoy project management work). The way I look at it is I mean in my early years I hate it. I hate it because you need to deal with people, you need to get people to work, you need to persuade people to see your viewpoint but after so many years it's a blessing in disguise. Whatever skills you learn in project management is actually portable to your daily life. (Participant 06)
>
> Ya, for personal growth. Yes, yes and my PMP is on my own pocket. I don't want the company to pay for me, I go on my own. For personal satisfaction. Yes, just to have the PMP on my name card. (Participant 06)
>
> And on top of it, why I enjoy project management, is the sheer nature of projects. I like to do things which are different. And projects are different. Every project is different, is unique. So you are never doing repetitive work. (Participant 10)
>
> I attended some pre (PMP) certification classes also... Because my company is willing to sponsor and I want to take up the sponsor. (Participant 25)
>
> Yea, because my company, they are pretty matured in methodology, delivery methodology from the software and project management so they encourage their staff to get the certification. (Participant 28)

In conclusion, analysis of the results revealed that the majority (71%) of research participants expressed their belief that as an emerging profession, project management practice is on the right track towards professional recognition. Advancing the project management practice to a professional status, the requirement to standardise the scope of

project work and the requirement for standardisation/quality of practice accounted for almost three-quarters of the reasons why project management practitioners were supportive of professionalisation. On the other hand, the complexity of project management practice and the perception that project management is just a role with no special function are the top two reasons why some research participants (29%) were pessimistic about the journey towards professional identity.

Overall, research participants acknowledged that the journey to achieve professional identity would require substantial investment, resources, time, and effort by both project management practitioners and professional associations. This is mainly because of the lack of awareness among local project organisations of the importance of project management practice; and the dynamic nature, scope, and prominence of project management practice across a range of industries. In addition, this research concludes that for project management to succeed as a profession, both professional associations and practitioners need to work together to acknowledge and pursue the reforms necessary to meet this objective. The following quotation from Participant 16 sums up the general sentiments of research participants about the journey to achieve professional identity:

> I suppose, seems like there is a conclusion here … journey to gain professional identity … The journey actually involves the environment, whether they are sensitive to how important project manager is, if they are not sensitive to it, the professional identity may not be there. I think that is the conclusion. The awareness is needed to achieve this credibility as a whole …

In summary, Research Question 2 delved into project management practitioners' desire to attain the professional status, their confidence about attaining it, and their motivation to the journey. The motivation towards the journey to achieve professional identity revolves around the effort project managers are willing to make to promote and advance the identity that is associated with their trade or profession. Half of the research participants (50%) perceived that strong professional motivation towards achieving project management practice is important for the occupation to progress towards professional identity. The research interviews suggested three main dimensions (or categories) of motivation namely; accountability, emotional attachment, and cost association.

4.5 Analysis of findings

The analysis of the transcriptions from the interviews revealed 91 nodes or MUs (see Appendix 5), which were eventually organised into 11 themes. These themes were derived

from the two research questions. The 11 themes and the participants' responses are analysed next.

4.5.1 Theme 1: Body of knowledge

Research participants generally considered that the existing PMI PMBoK is still evolving, is too generic, lacks standardisation, and is not a universally accepted, global standard for project management practice. Nonetheless, the participants were content to adapt to the use of different bodies of knowledge in the different projects that they managed. The inability to develop a body of knowledge that is sufficiently accepted and valued as a foundation for project management practice is perhaps the main reason why project management still struggles, globally, for control of the occupation.

4.5.2 Theme 2: Training and education

According to Ahsan et al. (2013), a project manager's role is "one of the most challenging jobs in any organisation, because it requires a broad understanding of the various areas that must be coordinated and requires strong interpersonal skills" (p. 36). About ninety per cent of the participants placed great emphasis on proper training and education to give project managers the right skills to manage projects that are complex and laden with uncertainties, amid exponential growth in technological advances (Todhunter, 2013). Although the participants disagreed about the minimum education level a project manager should possess, they agreed that academic education from recognised tertiary institutions is necessary. However, participants from academic areas felt that the project management education path in Singapore could be improved further.

Some participants advocated apprenticeship, as they themselves had positively experienced it as junior project managers. They felt that mentorship, which they found through apprenticeship, is an important element in project management training. Therefore, as Morris (2011) concluded about strategies for managing major projects, a major test facing the project management practice is to make certain that practitioners have the intellectual capacity and the experience to directly address the challenges so often confronted in dealing with dynamic projects.

In addition to the knowledge to be acquired prior to practising project management, many participants considered continuous learning necessary to enable project managers to upgrade themselves. The participants were satisfied with the continuous learning

opportunities offered to them by the PMI Singapore Chapter. Most research participants agreed that there should be a basic educational requirement for project management practice. Some believed the local chapter of the professional project management association to be on the right track in promoting and organising informative and beneficial project management–related training and education. Overall, the participants acknowledged the dogged determination of individuals to improve themselves by attending continuous education such as seminars, workshops, and short courses. This "attitude of continuous learning" (Participant 45), despite the lack of formal project management education in Singapore, characterises the local project management practitioners.

4.5.3 Theme 3: Certificate and licensing

This study reveals that participants in favour of certification believed that certification issued by professional project management associations considerably improved their chances of favourable consideration by hiring managers and securing a project management job and is therefore an important foundation for a project manager's career development. Approximately forty-two per cent of research participants reported having current project management certification. The majority of the remaining research participants had certificates that were no longer current. Many research participants valued certification as they saw it as aiding their career development and helping them secure a new position should they decide to change jobs. As such, many research participants expressed the view that the quality of the certification should be controlled to improve its credibility, and they were dissatisfied with the current level of governance of the certification because of the perceived ease in attaining it.

In view of the importance given to project management certification, research respondents proposed that certification should be more stringent and there should be a certain minimum level of competency. They also spoke of the need to perform reviews and audits to ensure a high quality of project management certifications and licensing schemes, as many felt that the current level of gatekeeping control performed by PMI was not sufficiently strict or comprehensive. Many participants would like the gatekeeping to be similar to those found in the major established professions of medicine, law, and architecture. Some of the participants, however, noted the complexity in regulating the certification and licensing.

Generally, the participants said that to enhance and promote project management professionalisation in Singapore it is essential to employ effective and well-functioning

certification and licensing schemes. Interestingly, research participants believed that the success of the project management professionalisation journey depends on regulating the provision of project management services by certification and licensing, even though it may appear complicated and difficult to accomplish.

Gatekeeping control of certification and licensing enforces the quality assurance process, ensuring the effectiveness and functionality of certification and licensing schemes for the provision of project management services. Such processes are established in traditional professions like medicine and law (Hällgren et al., 2012). Eighty-one per cent of research participants already have the most prevalent certification, which is the PMI's PMP credential.

4.5.4 Theme 4: Self and government regulation

Some research participants opined that project failures should drive the demand for government regulation of the practice of project management. One of the key activities of process models of professionalisation theory is practitioners and professional associations working as regulative agents to determine who can or cannot practise project management (Thomas and Zwerman, 2011). Indeed, some participants emphasised the important role of project management associations in promoting the need for regulation within the society. This research outcome is in line with Zwerman et al.'s (2004b) point: "The associations become the centre of control for the practitioners; they represent the interests of the practitioners to the outside world" (p. 9).

Government regulation provides the recognition of professional mastery (Todhunter, 2013), and research participants shared how unlikely it would be for the government to step in to independently regulate the current practice of project management. In other words, there is little impetus for this power and market model to apply in this instance.

4.5.5 Theme 5: Cost overhead of professionalisation

Some researchers claim that the professionalisation of an occupation is an unnecessary and expensive overhead (Sharma, Chrisman, & Chua, 1997), because it creates a legal liability to be assumed by the practitioners and increases the costs of obtaining the services of a professional (Thomas and Zwerman, 2011). Some of the participants acknowledged and understood these cost overheads and suggested that it might be too costly for some project managers. The results of this study correspond with Thomas and Zwerman's (2011)

perception that "[m]aintaining professional status becomes a cost and necessity" (p. 274) of carrying out professional project management practice, for two reasons. On the one hand, the practitioner would be obliged to maintain professional knowledge and continuously update and upgrade skills; and on the other hand, organisations and projects would have to hire the services of a professional. For this reason, it is necessary to understand the cost overhead that has profound effects on the advancement and maintenance of project management professionalisation.

As described earlier, the cost overhead of professionalisation may create further complications in moving the occupation towards professional status. As some of the participants indicated, these costs might be too much for some to bear, even though they understood the necessity of the investment. Such sentiments contribute to the lack of total group resolve, which may hamper the progress in that direction.

4.5.6 Theme 6: Practitioner name or title

Research participants were generally proud to hold the title of 'project manager', and were comfortable being associated with the project management area of practice. For them, professional identity includes a sense of prestige, status, and image. The perceived portability of project management knowledge across multiple organisational settings and the many interesting roles of the project manager in the dynamic, multifaceted nature of the practice requires a project manager to adapt to changes and situations as they arise, which engenders a sense of pride. Although the project management practice is an accepted role and appears in many industries and organisations, there is no clear definition of the title 'project manager' (Thomas and Zwerman, 2011, Turner and Müller, 2003). The research results highlighted that the misuse and unregulated use of the title were due mainly to the separation between the project and manager title, making it a poor fit between the advertised role and actual role and reflecting the lack of a clear definition by hiring organisations. This has negatively affected the professional status of project management practice. The research participants expressed unhappiness with the current misuse of the project manager title and the lack of control over the definition and role of a project manager.

4.5.7 Theme 7: Field of operation

Many research participants spoke about the lack of control over the definition and role of a project manager, and lack of career paths for project management practitioners. They also

observed that project management practitioners are often ineffective and lack proper project management qualifications.

To complicate matters, many participants practised project management part-time. They found juggling managing projects with other roles to be stressful, as they would work longer hours to complete their work. They also suggested that a project manager's field of operation should be on a full-time and not an ad-hoc basis, because of the significant and growing use of project managers to build organisational success. This is in line with Bargaoanu and Dobrescu's (2006) findings that: "The career paths for project managers are not always so clear" because often project managers "do not work full-time, but are assigned project-management responsibilities beside their regular job" (p. 120). From the viewpoint of professionalisation theory, being recognised as a full-time practice with defined boundaries can be seen as the first step towards occupational control associated with the process model of professionalisation (Thomas and Zwerman, 2011).

4.5.8 Theme 8: Personality traits

Almost all research participants (94%) agreed that project management practice requires more than just technical competencies and encompasses human-related competencies and soft skills. Communication skills, people skills, and organisational skills accounted for almost three-quarters of the personality traits that research participants deemed necessary in the management of projects. The participants' testimony of the importance of project managers' personality traits for successful project management, and their influence on professional identity development (Cavallone, 1984), combined with the apparent lack of emphasis placed on these skills in project management training and education, makes a compelling argument for focusing on project managers' training; especially within the context of tertiary education (Pant and Baroudi, 2008).

4.5.9 Theme 9: Accountability

Accountability illustrates the commitment process based on a project management practitioner's sense of duty and obligation to his or her area of practice. Employees with this type of commitment remain associated with their "profession because they feel they ought to do so" (Bagraim, 2003, p. 6) or because they feel "a sense of duty or obligation to the profession" (Lo and Snape, 2005, p. 445). In general, participants agreed that the PMI's existing Code of Ethics and Professional Conduct is relevant and valuable to the local project

management community as it provides fundamental principles and guidelines for practising project managers. According to PMI (2015b), the purpose of the Code of Ethics and Professional Conduct is to instil confidence in the practice of project management and to help an individual become a better practitioner. In addition, accountability also reflects the practitioner's ability to carry out the work autonomously, demonstrating professional expertise in handling the work situation. In contrast, where there is no autonomy and the work is defined and designed by a bureaucracy, accountability should be held by the organisation that dictated the decision and not by the project manager who executed it. It is akin to a doctor who instructs a nurse on the treatment plan for a patient, where the doctor is accountable for the outcome of the treatment plan, absolving the nurse from liability for the outcome of the treatment. In this way, accountability should begin immediately at the commencement of the project and all project management practitioners should be liable for their errors and the outcomes of the project.

4.5.10 Theme 10: Emotional attachment

Emotional attachment refers to a commitment process based on a project management practitioner's emotional relationship with his or her work. Individuals with this type of commitment personally identify with their particular trade or line of work and choose to be associated with it because they want to (Lo and Snape, 2005). Overall, project management practitioners were proud to be associated with the project management practice because of the perceived status and interesting challenges associated with project work. They displayed their emotional attachment by participating in various talks, conferences, and seminars organised by the PMI. From the theoretical perspective, these emotional attachment activities can be seen to be associated with the process model approach of professionalisation.

4.5.11 Theme 11: Cost association

Cost association is the commitment process related to a project management practitioner's perceived cost of leaving the project management practice (Bagraim, 2003). Often, the training offered by educational institutions does not meet project managers' requirements (Beukers, 2011). Individuals who have a strong commitment to their professional identity would certainly "pursue lines of activity which sustain and support their identities to the extent they are committed to those identities" (Burke and Reitzes, 1991, p. 250). According

to Morrow (1993), professional commitment is basically a form of work-related commitment that describes the relative strength of a profession in an individual's overall life.

Because of the high levels of investment and the progressive nature of the project management career path, the interviewed practitioners were more inclined to continue their involvement and commitment with a positive attitude, encouraged by job satisfaction and organisational support. From the lens of professionalisation, these cost association activities form one part of the overall process model of professionalisation theory.

4.5.12 In summary

This research revealed no agreement among participants about what is meant by the term 'professional identity', and in fact fifty-two per cent suggested that a project manager's professional identity is an evolving construct that differs according to project-related contextual factors, such as the resources and processes involved in the management of project work. However, from the research interview data, the dominant category characteristics that contribute to the professional identity of project managers in Singapore are body of knowledge, training and education, certification and licensing, self and government regulation, practitioner name and title, field of operation, and personality traits.

The motivation for project managers in promoting project management professionalisation appears to be closely associated with accountability, emotional attachment, and cost association. Approximately half of the research participants (49%) emphasised the importance of professional commitment as accountability or obligation to the practice, in the advancement of project management towards professional identity. Other reasons related to emotional attachment to the work and the perceived financial costs of leaving the practice. Collectively, these three dimensions of commitment revealed a psychological state that describes project managers' relationships with their profession and how much more they are willing to do to promote their professionalisation. This research reveals that high levels of motivation or commitment by project managers in these three areas contribute towards higher levels of activity towards the professionalisation of the occupation.

The 11 themes that were identified during the data analysis arising from the research questions were categorised into broader themes as shown in Table 4.10.

Table 4.10: Identified themes

Research Questions	Themes	Broader Themes

Research Question 1: **How do project managers conceptualise being a professional in their working role and what criteria do they use?**	1. Body of knowledge 2. Training and education 3. Certification and licensing 4. Self and government regulation 5. Cost overhead of professionalisation 6. Practitioner name and title 7. Field of operation 8. Personality traits	Project management identity construct
Research Question 2: **What is the strength of project managers' motivation to commit to the process to achieve a stronger professional status?**	9. Accountability 10. Emotional attachment 11. Cost association	Motivation to attain professional identity

4.6 Chapter summary

This chapter presented the analysis and overall findings of in-depth interviews with 48 project management practitioners. This research study contributes to the academic body of knowledge by identifying essential factors concerning the journey towards professionalisation of project management in the following areas:

- "Project management identity construct": How project managers define professional identity. In other words, this broad theme illustrates the participants' perception of the identity construct that distinguishes project management practice from other occupational groups.
- "Motivation to attain professional identity": Project managers' perceptions and motivation towards achieving professional identity, and what they believe are the essential elements to bring about project management professionalisation in Singapore. This broad theme refers to their thoughts on the way forward, their willingness to be involved in this journey and what they believe to be desirable processes for the achievement of professional identity.

Furthermore, this study proposes to broaden the scope of the theories of professionalisation by bringing together the three key models (attribute models, process models, and power and market models) to better illustrate the various aspects, states, and stages of project management professionalisation. This is because to understand project management's journey to professionalisation it is necessary to analyse a combination of perspectives:

- The distinct traits (or attributes) of project management practice that set it apart from other occupations
- The relevant processes that could lead to its professionalisation
- The potential forces or strategies that can shape and contribute to its professionalisation.

Overall, the findings of this study are in line with those of Thomas and Zwerman (2011), Zwerman et al. (2004a), and Zwerman et al. (2004b), who also observed that advancing project management towards professional status requires the combined efforts of key players, including academics, researchers, consultants, professional associations, organisations, and project managers.

It is noteworthy that the participants of this research study shared no common understanding of the definition of professional identity in project managers, mainly because it is undergoing constant interpretation and re-interpretation of, for example, the definition of what a project manager is, the scope and autonomy of the practice, key project stakeholders, project size and complexity, and the project team members' competencies and resources. Nevertheless, this research analysis managed to establish three common characteristics of project managers' professional identities: the title, the field of operation, and personality traits. This research study suggests that if project management is to pursue professionalisation, it is essential to define the field of operation for project management practice, as it has direct implications for exclusive control over the project manager title and the project manager personality traits deemed necessary for successful project management practice.

This chapter also examined a new dimension that contributes to professionalisation theory; namely, commitment from the practitioners. Commitment is reflected in the participants' willingness to be personally accountable for the outcome of the projects they manage, the emotional attachment they have to the practice, and their readiness to invest in the overheads that are associated with professionalisation. The interviews revealed no consensus from the participants on their willingness to commit to the journey. The participants expressed reservation over incurring the costs associated with professionalisation, such as paying higher licensing fees or insurance. Therefore, the conviction from this group to pursue professional status in Singapore is weak.

Having presented the findings from the analysis of research interview data, Chapter 5 of this thesis will further discuss these findings in relation to the research objectives of this study.

5 DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

The study on project managers' journey towards attaining professional status has provided interesting insights into the requirements to achieve a successful outcome in Singapore. Results from the analysis of research interview data previously presented in Chapter 4 are considered further in this final chapter.

This chapter is divided into six sections apart from this introduction. Section 5.2 summarises the main aims and objectives of the research. Section 5.3 discusses the detailed findings in relation to the research questions and Section 5.4 the contributions of the research. Section 5.5 reviews the research limitations and Section 5.6 offers recommendations for future research. Finally, Section, 5.7 concludes by summarising the research results and the contribution of this study.

5.2 Revisiting the research aim and objectives

Despite recent attempts by research scholars to address challenges to the status of professional identity, there have been few studies on the personal perspective of the members of occupations who are seeking to achieve professional status. The lessons learned from the lived experience of these incumbents might explain the limitations inherent in the current system. This research has sought to understand more about one emergent profession, that of project manager, and gather an appreciation of what is required in this journey, the members' confidence in achieving a successful outcome, and how motivated they are to the journey to advance their occupation to professional status in Singapore. In consequence, the outcome may clarify some of the behaviours that project managers perceive would contribute to a successful professionalisation outcome and the extent to which this is actually present in members. This information will provide a better understanding of individuals' conceptualisations of what a profession is, how aspiring occupations might reach such a goal, and how likely they are to achieve it.

This study has provided a systematic approach to gathering, analysing, and evaluating perceptions of the professionalisation journey from project managers' lived experience. The insights gathered through the research interviews can improve our understanding of the individuals' struggle while transitioning from one type of identity (occupational) to another

(professional). Furthermore, such an understanding may help other occupations that desire to professionalise to consider the value of collective effort, starting with individuals, in propelling the group forward.

5.3 Discussion of findings

The findings of the research will be discussed in tandem with the concepts of professionalisation models that were discussed in Chapter 2. The research questions, which were derived from the identified research gaps, will be answered by exploring the research data gathered and analysed in Chapter 4. To recap, the following are the two research questions that shaped the findings for this study:

Research Question 1: How do project managers conceptualise being a professional in their working role and what criteria do they use?

Research Question 2: What is the strength of project managers' motivation to commit to the process to achieve a stronger professional status?

Data analysis derived from both research questions revealed 11 themes (see Table 4.10), which are further categorised into broader themes that will be used to consider a new area of contribution to professionalisation theory.

To support theoretical development in line with the research questions, the next step involves thematic analysis of these emerging concepts in relation to the theories of professionalisation (based on the literature review presented in Chapter 2).

5.3.1 Project management professional identity construct

The underlying concept in the construct of a professional identity lies with the members electing that the occupation to which they belong (e.g. nurse, teacher, librarian) deserves to be awarded this status (Beijaard et al., 2004, Liaschenko and Peter, 2004, Oweis, 2005, Wade, 1999). As described by Nash and Shaffer (2011), the members must adopt the group's core values and practices, and align their personal identity with the profession. For emerging professions, construct development is ongoing through the process of interpretation and re-interpretation of experiences (Beijaard et al., 2004, Fitzmaurice, 2013). In this process, members of these groups may question and have conflicting ideas on what the elements of their emerging profession should be.

This question examined the project management practitioners' perspectives on what they believe to be the construct of their group's identities and the strategies essential to gain

professional status in Singapore. Seventy-one per cent of the participants considered that project management is either already a profession or is able to achieve professional status based on a layman's understanding of the professional definition, by which the profession has specialised knowledge and expertise. However, as individuals the participants were not taking active steps in addressing issues that surfaced during the interviews and which they considered to be important. These issues are part of the criteria that define professional identity from the academic perspective (e.g. standardised body of knowledge, certification, and licensing).

This lack of action could indicate the project managers' limited grasp of the requirements for achieving this status, one of which is having formalised tertiary-level education. Consequently, there is insufficient confidence in attaining professional status. They are unable to take the lead in driving the change and perceive that they lack control in effecting the change in, for example, influencing regulation requirement at government level. Nonetheless, the study captures the research participants' perception of the construct of their professional identity through the 11 elements discussed in this and the following sections, and how they perceive they could achieve it as group and individually.

About fifty-two per cent of the participants felt that a project manager's identity was not a fixed concept. They attributed the difference in project management scope in different industries as one of the factors causing the inconsistencies in project management identity. The ambiguity in defining a profession's identity is aligned with Beijaard et al.'s (2004) study, which suggested that before settling into a stable identity agreed by the group, establishing a professional identity is a continuous and dynamic process. Ibarra (1999) further offered that with emerging professions such as project management, individuals might use provisional versions of their professional identity before assuming the finalised version. This is reflected in the research participants' differing views on project management identity as they experience it through various iterations and societal confirmations while holding the role (e.g. having both technical and managerial skills and following standardised methodology). Nonetheless, about seventy-one per cent of participants were optimistic that the occupation would become a profession. Twenty-one per cent of participants (each with less than 20 years of experience) considered that it was already a profession. Participants with more than 20 years of experience gave equally mixed feedback on whether project management could become a profession. The twenty-nine per cent of participants who did not think that project

management was a profession viewed it as just another role to be assumed in addition to their main occupation (e.g. IT systems analyst or engineer).

The concept of a project manager identity was analysed from the data collected, which was categorised into themes. The themes that received the most positive responses from the participants were the use of a body of knowledge, the importance of training and formal education in project management, and a balance of technical and soft skills that a project manager should possess. These themes bolstered claims made by other researchers such as Buckle and Thomas (2003), Hodgson (2005), Curnow and McGonigle (2006), Stretton (2011), and Thomas and Mengel (2008) that these areas are important elements to consider in project management professionalisation.

5.3.1.1 Theme: Body of knowledge

According to Thomas and Zwerman (2011), the development of a reasonably well-established and institutionalised project management body of knowledge is essential for an occupational group in gaining professional stature and good practice. This view was shared by eighty-one per cent of the research participants, who use one form of body of knowledge or another. The range of methodologies they use in their course of work varies from in-house to common methodologies such as PMBoK.

Exclusivity over the body of knowledge is about knowledge claims to legitimise the monopolisation or exclusive control and use of one globally accepted body of knowledge for project management practice. Although the presence of a collectively-developed project management body of knowledge is a significant milestone for professional recognition (Thomas and Zwerman, 2011), the findings of this research suggest that the existing body of knowledge on project management is still evolving and lacks standardisation, be it within or outside Singapore.

Charvat (2003) indicated that a single methodology is not suitable from industry to industry because of the "differences in life cycle, market sector, product, size, technology and situation" (p. 32). Stretton (2011) also noted that because of the vested interests of respective project management professional associations in maintaining their own bodies of knowledge with big investment in their commitment and certifications processes, there would appear to be minimal motivation by developers of these bodies of knowledge to merge them into a single universal body of knowledge for project management practitioners worldwide to use due to the huge effort in developing them individually. He surmised that it would be difficult

to predict any situation or reason that might prompt professional associations to cooperate voluntarily to develop a global body of knowledge to which they would jointly commit. From the arguments of both authors, it would seem that project management would not be able to attain professional status as the associations are already struggling to standardise the body of knowledge.

The situation was posited by Engwall (2003) as early as 2003. He claimed that this inability to agree on a single body of knowledge had deprived the establishment of a solid theoretical foundation in the field of project management. This predicament is further exacerbated by the fact that no exclusive body of knowledge has held the esoteric position of universal acceptance (Grey, 2011) and there have been no universally recognised accounting principles in the world of project management doctrines (Thomas and Zwerman, 2011).

As described by Charvat (2003) and supported by Bresnen (2016), the numerous disciplines (e.g. engineering, construction, IT, biomedicine, creative arts and advertising) within the practice of project management add to the challenge of developing a single body of knowledge incorporating these different and unique practices. Bresnen (2016) added:

> [T]hese domains of practice are not only quite distinct in terms of their fundamental tasks and goals, they also often have their own distinct institutional structures, value systems and practices that shape and influence perceptions of what is acceptable and required project management knowledge. (p. 330)

In addition, integrating the theoretical foundation (if any were to be discovered) as suggested by Engwall (2003) and implementing it in practice would be another challenge in developing a unique body of knowledge for project management. For example, IT has its own systems development lifecycle, which follows the methodology of requirement gathering, systems design, systems development, user acceptance test, and implementation. Engineering has its own methodology, concepts, architecture, design, development, and manufacturing. Both of these disciplines have to adhere to their own methodologies, in addition to the project management methodology of project initiation, planning, execution, and closure. Nonetheless, the effort to develop a cohesive body of knowledge is difficult but not impossible (Bresnen, 2016), as proven in the professionalisation of chartered accountants, in which the different bodies of knowledge and professional associations were consolidated to streamline the examination standards and entry to the profession (Lee, 1991).

In Singapore alone, as revealed in the research interviews, more than one project management body of knowledge is used. The research participants reflected that they incorporated different methods—PMBoK, CITPM, and domain-specific methodologies—as

well as those in-house methodologies developed by organisations in response to their projects' needs. Even though the research participants agreed on the importance of having a unique body of knowledge and most of them used the body of knowledge available to them through their organisation, they had not considered the significance of having one standard body of knowledge outside their organisation.

This might be because the application of project management methodology is dependent on the organisation's culture. For instance, if the organisation does not have a proper project management steering committee, the project manager would not need to provide the stakeholders with a regular project status update. The application of project management methodology could also be organisation-specific. Only a handful of project managers who work with project managers in other organisations and countries considered it important to have a standard body of knowledge, because they would benefit from sharing a lexicon. A universally standardised body of knowledge would also allow mobility for project management as more project managers become involved in projects or practices across national boundaries (Faulconbridge and Muzio, 2012, Paton et al., 2013). The research participants agreed that there are challenges in consolidating the methodologies into a single body of knowledge, as practising project managers might prefer to use the methodologies with which they are more familiar. And yet they are comfortable with the current practice of using their own version of a project management body of knowledge. Thus far, the flexibility of this approach has worked for them, providing them with little motivation to have it standardised.

Even though the importance of having a body of knowledge is not disputed by any of the participants, it does not seem to have led to actions to consolidate one. Moreover, having a standard body of knowledge would appear to be a necessary part of professionalisation (Larson 1979, Schilirò, 2012). Takase et al. (2001) even argued that one of the reasons nursing failed to lay claim to full professional status was because it lacks an exclusive body of knowledge. Isik et al. (2009) pointed out that the strength of project management lies in its methodology (which is compiled in a body of knowledge), and this is where project management provides value to organisations. Maddalena (2012) concurred with this observation and emphasised that the application of project management methodology leads to a projects' successful outcome.

The application of project management methodology, following the best practices put together in a body of knowledge, provides the project manager with the most efficient and

effective way to organise tasks or activities to accomplish the project outcome, through consistent adherence to the processes. With the significance of the methodology to project management's value to organisations, it would be paramount for project management to develop a universally acceptable methodology as part of attaining professional status and as proof to society that it epitomizes the concept of professionalism. The fundamental requirement for claiming to have an esoteric body of knowledge that is acceptable in professionalization theory is to ensure that it is science-based with established principles (Yurchenko and Mansurov, 2014) that can be achieved through research and education and it is integrated with practice.

However, as mentioned, this research showed no impetus on the part of the project managers in this sample to consolidate the bodies of knowledge into a single unified standard to which all project managers can refer. Although many participants agreed that the PMI's body of knowledge is too generic and would benefit from further revisions to make it more universally more acceptable, they did not offer any specific suggestions on what these changes should be. Morris (2013a), however, recommended that PMBoK could benefit from including prescriptive guidance for managing projects successfully (Pinto and Winch, 2016). Because PMI's body of knowledge was developed by the PMI organisation, the participants did not feel they were in a position to offer any contributions to its development. However, they were more inclined to 'develop' their version of a methodology that would suit their own purpose in running their projects more effectively. Based on the challenges posed in developing a standardised body of knowledge, it seems likely that if project managers were to decide to develop one, they might choose to approach it holistically such as determining the elements shared among the different domains of project management that will form the universally accepted fundamental methodology for project management and a domain-specific approach for the different domains.

5.3.1.2 Theme: Training and education

Training and education represent the special training and education necessary to provide project management practitioners with first-hand knowledge to deal with project complexity. A profession is basically an endeavour that requires specialised knowledge and often lengthy and rigorous academic preparation (Bargaoanu and Dobrescu, 2006). Proper training and education is of great importance when discussing the essential elements to enhance local project management professionalisation. In today's technology projects, there is increasing

complexity, chaos, and uncertainty (Lavy and Yadin, 2013, Maylor et al., 2013, Thomas and Mengel, 2008); a globally distributed project environment (Lee and Yong, 2010); and the need to manage larger teams (Lavy and Yadin, 2013) with members separated by time, geography, and culture (Desmond, 2012).

Proper project management training and educational resources are needed to deal with the complexity, unpredictability, and the social nature of project work. As such, the development of a recognised academic award will be crucial for the advancement of project management practice towards professional status (Thomas and Zwerman, 2011). However, as pointed out by Todhunter (2013), there exists a fragmentation of training and education in project management, as many "established and recent entrants to project management are often unsure whether to seek professional certification or higher education, and the advice they receive is contradictory" (p. 5). Indeed, according to Koskela and Howell (2002), the lack of theory in the field of project management practice has rendered training and education more difficult and hindered the effectiveness of its professionalisation as postulated in Section 5.3.1.1 (Theme: body of knowledge).

In this research, a great deal of feedback from participants revolved around the importance of and requirements for project management training and education. This included the need for a recognised academic award for the advancement of the practice, supplementation of academic knowledge with relevant project work experience, an overall defined training and education curriculum for project management practitioners seeking basic and continuing professional education, and a home faculty for project management within the higher education setting. Similar to other established professions (e.g. medicine and law), formal education will ensure the practitioners have standardised fundamental knowledge and skills.

However, formal education for project management is laden with challenges, as there are still debates as to whether project management can substantiate itself as an academic discipline (Kwak and Anbari, 2009). In Singapore, the study of project management at the tertiary level is usually embedded in other disciplines such as the School of Design and Environment and the School of Mechanical and Aerospace Engineering in the local universities. The lack of its own faculty at tertiary level goes against the basis of professionalisation (Hall, 2010). Evidence from this study is also consistent with the views of Thomas and Zwerman (2011) and Todhunter (2013) that project management training and education still reside within the realm of corporate training, consulting, and professional

organisations, and have no clear home within the higher learning institution. Because of the lack of an overall defined training and education curriculum, project management practitioners are often unsure whether to seek professional certification or higher education.

In spite of the challenges in establishing tertiary-level education, the availability of continuous learning from the professional associations in Singapore has given the participants access to current knowledge in this field. Some of the continuous education provided includes soft skills that the participants considered were important for project managers to possess. As posited by Söderlund and Maylor (2012), the business and workplace environments have become more complex and competitive, hence the need for project managers to have soft skills to enable them to navigate their way through these challenges (Thomas and Mengel, 2008, Todhunter, 2013, Viaene and Van den Bunder, 2011). Continuous learning is an inherent feature of professionals (Kerfoot, 2012). The value of professional education in bringing new knowledge to practising professionals cannot be understated (Eraut, 1994, Hoic-Bozic et al., 2009, Jackson, 1970).

In addition, the results of the research data also suggested the importance of supplementing project management academic knowledge with real project work experience, to ensure project success. The importance of having an apprenticeship as part of training is immense for occupations that require practitioners to perform the work with minimal supervision. In the case of medicine, medical school graduates are required to work under close supervision for a number of years before they are allowed to work independently. Many participants felt they had been thrust into the position of project manager without proper guidance on how to run projects effectively. Participants who benefitted from apprenticeship revealed that supplementing knowledge with real project experience under supervision is particularly effective in their learning process. The notion of apprenticeship was mooted by Goode (1960) when he defined the attribute model for the professionalisation theory. The concept of apprenticeship for skilled occupations was implemented in government-regulated training in Continental and Scandinavian countries; because of its effectiveness, it later became a model for others (Evetts, 2012). In the case of project management, participants felt that apprenticeship should be considered for formal incorporation into the training program.

5.3.1.3 Theme: Certificate and licensing

The themes that received equally mixed feedback are the value put on certification, and self and government regulation. Of the participants, forty-two per cent held an active project

management certification, while the majority of the remainder held lapsed certificates. They valued the certification because it increased their chances of getting a job. Therefore, the other fifty-eight per cent had already secured a good position and did not find the need to maintain it to retain their job. However, a survey by PMI members of project managers' earnings showed project managers with active PMP certification received salaries that were twenty per cent higher than project managers without it (PMI, 2015a).

Gatekeeping control of certification and licensing helps regulate the quality of the process that certifies the provision of project management services. Laplante (2005) noted that there is an important difference between certification and licensing: "Certification is a voluntary process administered by a non-government entity. Licensing is a mandatory process controlled by a state licensing board" (p. 41). However, to succeed, such schemes require the concerted efforts of various project management stakeholders. From the standpoint of professionalisation theory, the quality assurance processes to review and audit the quality of the project management certification and licensing schemes are associated with process models. In Thomas and Zwerman's (2011) paper about the professionalisation of project management, without any legal authority to formally determine who is qualified to practice, it will be incredibly hard for practitioners to lay claim to any sort of special status or privileges. The governance to ensure that certificates and licenses are arête have been compulsory for many established professions, such as medicine and law (Hällgren et al., 2012). The research participants generally agreed that certification is important and almost half have project management certification.

According to Kupec (2013), the PMI's PMP credential is highly valued because it is "supposed to demonstrate that an individual possesses the knowledge of project management principles and a foundation of experience and education in project management" (p. 2). In fact, PMI is the largest project management member association in the world (Kupec, 2013) and according to the 2012 PMI annual report, has more than 650,000 members and credential holders globally in more than 185 countries. In Singapore alone, the membership grew from 170 in 2000 (PMI, 2016b) to 1850 in 2012 (PMI, 2016a). Given the value accorded to project management certification, "it becomes incumbent upon the granting organization to ensure that professional standards and instructional content reflect best practices within the discipline" (Starkweather and Stevenson, 2011, p. 31).

Supporting the findings of De Los Rios-Carmenado, Díaz-Puente, and Martínez-Almela (2011) this research established that project management certification serves "as a

strategic element for improving employability, and complements professional development for individuals and organizations" (p. 44). However, the research data analysis highlighted that the current level of gatekeeping control performed by the PMI is neither strict nor comprehensive enough to ensure the quality of PMI's project management certification scheme. In addition, the current project management certification is not sufficient for legally designating or licensing who is qualified to practise project management. This is due to the largely voluntary certification approach in project management, ranging from knowledge-based assessment to competency standards based on practice (Thomas and Zwerman, 2011).

Given the importance of project management certification to regulate the provision of project management services, the participants were unanimous about the need for more stringent criteria to attain the certification. The participants felt that, after gaining certification, there should be self-regulation of project management quality to ensure that project managers continue to uphold high standards in performing project management work.

5.3.1.4 Theme: Self and government regulation

Self and government regulation in the context of project management practice refers to project management practitioners, professional associations, and the government working as regulative agents or authorities to decide who is or is not allowed to practise project management (Hällgren et al., 2012), and to regulate practices in order to represent public interests (Laplante, 2005). Lester (2016) defined self-regulation in this context as "action by profession itself to put in place, operate and gain acceptance for standards and processes that are designed to ensure the quality of practice" (p. 2).

Lester (2016), in his study of four professional communities in the UK (landscape architecture, cultural heritage conservators, family mediators, and vocational rehabilitators), discovered that successful self-regulation requires members to be professionally qualified and to have the resources to maintain the regulatory function. Cultural heritage conservators were ineffective in carrying out self-regulation because they had inadequate training and accreditation by two different bodies, which did not meet the criteria for being a profession. Lester also questioned the feasibility of a volunteer-driven regulatory body, because regulations require administrative overheads such as consultancy, insurance, and office facilities. Both of these concerns apply to the current situation with the project management group and Singapore's project management association, which is operated by volunteers.

The lack of legal oversight to regulate the practice of project management has considerable implications for the realisation of professional status in project management (Thomas and Zwerman 2011). Stiglitz (2009) suggested that government policy interventions to prevent failures “should be designed to make less likely the occurrence of actions that generate significant negative spill overs, or externalities" (p. 11). Therefore, with regulation being one of the essential elements of achieving professional status, it is necessary and essential to attain “political, social and legal recognition of the value of regulating project management for the good of the society” (Thomas and Zwerman, 2011, p. 272).

Generally, research participants in this study thought it unlikely the government would step in to independently regulate the current practice of project management at the national level unless it was necessary. Also, as all regulations have expected benefits and costs, it is the government's task to identify and implement regulations for which the benefits exceed the costs (Greenstone, 2009). However, many of the participants in this research study believed that only project failures with substantial negative consequences might, over time, trigger demand for government regulation of project management practice. They suggested that the next best approach to regulation is implementing it at the organisation level, which could be achieved if project management professional associations persuade companies of the value of doing so, given the gravity of project failures, and in fact, take the lead in the movement towards professionalisation.

In summary, a shortage of resources for self-regulation and legal capacity to manage the practice of project management has considerable implications for the lack of movement towards project management professionalisation in Singapore. The research data provide a compelling argument for regulating the practice of project management, which could be achieved by self-regulation of ethical project management practices through self and peer assessment. Similarly, the interview data also suggest that project managers in general support a larger advocacy, representative, and governance role by professional project management associations, which could promote awareness among companies and society at large. In addition, government regulation draws attention to professional competence (Todhunter, 2013) and safeguards public interest (Laplante, 2005).

5.3.1.5 Theme: Cost overheads of professionalisation

The themes that earned the least support from the participants were cost overheads, practitioner name, and field of operation. The participants felt that the cost overheads

associated with association administration and licensing would be too expensive for most project managers to bear which could come in the form of higher membership or examination fees, although it is the necessary financial investment to attain professional status. These costs include paying the association fees to register and monitor active licences among the members. Practitioners would incur higher costs in maintaining a licence than in earning certificates, and they would include fees such as insurance.

The professionalisation journey for knowledge-based occupations, characterised by increased specialisation, harsh competition, and continuous innovation (Schilirò, 2012), is full of barriers and challenges. In a project environment, every project is considered unique (Sommerville, Craig, & Hendry, 2010) and trends such as increased competition, shorter project lifecycles, tighter budgets, complex applications, and globally distributed multicultural project teams make projects difficult to manage (Hall, 2012). Further contributing to the cost overheads of project management practice are the magnitude of skills and competencies a project manager needs; the complexity of activities involved in a typical project; the need for domain and business knowledge; socio-economic challenges; rapid technological advancements; and the multifaceted nature of project management. This necessitates continuous and relevant project management training and education, with an emphasis on soft skills and real-life work experience.

Project management education is both time- and resource-intensive (Alam et al., 2008), because it must focus on preparing project managers to deal with the uncertainty and unknown possibilities of projects in the broader organisational context (Thomas and Mengel, 2008). This adds to the cost of updating the knowledge required for the profession. As Rosén (2014) concluded in her research into changes in the descriptions and requirements of professional communicators in Swedish job advertisements between 1960 and 2010, "operational and strategic skills were increasingly required" (p. 26) in professional practice over the past two decades. Project managers would also need to keep abreast with domain and business knowledge, also adding to the cost overhead. This coincides with Maylor at al.'s (2013) view that "low level of domain knowledge may be acceptable if the work is straightforward, but an accurate assessment of a difficult piece of work requires a significant understanding" (p. 46).

To complicate matters further, findings by Sommerville et al. (2010) highlighted that "the number of roles undertaken by a project manager changes with age and also the nature of the roles undertaken moves with the maturity of the project manager" (p. 132). In addition,

Beukers (2011), in her research on the project characteristics, challenged the training needs for project management of life-sciences research projects, concluded that, ideally, schooling for project managers "should be tailor-made to this target group, should emphasise soft skills next to hard skills and should be based on real life cases" (p. 98).

In addition, some participants were cautious about pursuing professionalisation because of the potential impact on project costs due to the increased cost of hiring licensed project managers. Licensing and the associated insurance (to cover any malpractice litigations) costs would increase the cost of hiring project managers and ultimately the project cost. Furthermore, one participant (Participant 32) questioned whether project managers would be willing to take the risk of being sued. This question strikes at the very foundation of being a professional, which relies on the practitioners' ability to dispense expert advice at their discretion and to be accountable for it (Funck, 2012). The challenge faced by the participants came back to the lack of definition of the project manager identity, and the lack of theoretical foundation for the practice of project management. Many were not willing to risk being responsible for areas which are not well defined. Therefore, the establishment of a strong project management identity through the prescribed elements presented in this study would ease the path to professionalisation for project managers.

5.3.1.6 Theme: Practitioner name and title

Research participants shared their perspectives about the process of gaining full control over the use of the practitioner title or name. According to Zwerman et al. (2004a), the lack of control of the project manager name or title is one of the factors contributing to the delay in gaining professional status. Similarly, the unclear definition of the project manager title, because of the many ways it has been used, has also contributed to its marginal status (Pollard et al., 2005).

An even greater challenge for members of this occupation is that they share it with project managers who gained the title without proper training or qualification. The absence of regulation at national or organisation level permits rampant use of the title by the unqualified personnel. One of the participants, a member of parliament, suggested that even though it may seem flattering to have a title that is sought after, practitioners thought that the lack of control over who used the title devalued the branding of the profession. Hence, qualified practitioners would find it difficult to associate themselves with unqualified practitioners who shared the same title, posing a threat that this occupation might lose genuine practitioners

along the journey. The research result agrees with Thomas and Zwerman's (2011) views that, as long as anyone can use the project manager title or name without regard to professional training or certification, it will be impossible for project management practice to gain professional status. In order to reach professional status, the practitioner title 'project manager' must be captured and controlled.

This observation resembles the experience of the medical profession at the start of their journey, when many unqualified medical practitioners shared the same title because there was no industry regulation. When unqualified practitioners sharing their title produced negative outcomes, it harmed the integrity of the medical profession. In response, the medical profession distinguished its identity by implementing standardised practice and regulation. The main difference between the medical and project management fields is the impact of bad practice. In the case of medicine, a negative impact potentially results in loss of life, whereas in project management, a negative impact results in financial and resource loss against the investment. As described by Flisbäck and Lund (2015), "few professions have so clearly succeeded in convincing society that their knowledge is essential and therefore in legitimising their own power" (p. 4). So it seems that project management does not fall into this category of professions.

Nonetheless, among the research participants the sense of identity is apparent, with many of them proud of the title. The common affirmation of the project management identity could be the result of a common interest, and reinforced by the professional association. This is unlike the experience of teachers in Russia where the "lacked sense of collective identity and common interest" (p. 11) was attributed to the varied working life and conditions (similar to project managers, who work in various disciplines and industries) with uncoordinated development of the knowledge base, because they saw each other as rivals rather than as partners (Yurchenko and Mansurov, 2014).

Furthermore, many project managers lamented the lack of a defined career path for this occupation. Young people might not want to choose this field if they realise that the chances of building a successful career are slim—similar to the case of nurses (Zakari et al., 2010) and preschool educators (Yurchenko and Mansurov, 2014). Yurchenko and Mansurov (2014) illustrated that the proportion of students who selected the teaching faculty in Russia declined from 44 per cent in 1950 to 8 per cent in 2008, causing a serious replacement issue: older teachers, with over 15 years of experience, constituted fifty-four per cent of the teaching population. The entry requirement into this profession was then lowered to recruit

more teachers, which in turn compromised the quality of the profession, leading to a downward spiral for the profession.

Ekrot et al. (2016) suggested that project managers' lack of career and development opportunities was due to the nature of their work; projects are inherently short-term and not a permanent proposition. In addition, the role of project managers is not well-described with the lack of career growth in most organisations (Ekrot et al., 2016). To further aggravate the situation, without opportunities to grow and learn, employees are likely to leave the organisation and their departure is detrimental to the organisation's performance and success (Ekrot et al., 2016). Therefore, to attract more talent into the field and retain experienced project managers, the participants advocated consistent career progression across different organisations.

5.3.1.7 Theme: Field of operation

The field of operation theme encompasses research participants' shared perspectives around the process of defining or delineating the area of project management practice. According to Evetts (2003), occupational closure is achieved by delineating the boundaries of a practice, and will "result in the monopoly of the expertise and service, and probably also in privileged access to salary and status, as well as in definitional and control of rewards for practitioners" (p. 404). In many ways, defining the boundary or scope of project management practice is essential for distinguishing the qualified from the unqualified, or insiders from outsiders (Muzio et al., 2011, Saks, 1999, Waddington, 1990). Likewise, according to a white paper by PMI (PMI, 2013a) on building high-performance project talent, "establishing a defined career path shows project professionals that they are a valued part of the organization" (p. 3).

Many participants assumed the role of project manager on top of the other roles they played in an organisation. This concept of multiple identities is inherent in many project managers, as discovered in this study. For example, some of the research participants are both IT systems analysts and project managers. While this phenomenon is common, it adds to the risk of identity conflict, which may lead to negative emotions and subsequently demotivate individuals from assuming the less desirable identity (Stets and Carter, 2011). Morris (2013b) posited that the extent of an individuals' commitment to an identity is reflected in the relative cost of giving up or losing possession of a role identity. If the project management practitioners (and who are also IT systems analysts) find the career lacks a defined path, they may give up this identity more easily and be less committed to it. It would appear that, over

time, project managers will have to decide which identity is more important to them (Burke and Stets, 2009).

Trends such as increased competition, complex applications, and changing societal values are making traditional project management a critical component of organisational success in different parts of the economy (Bargaoanu and Dobrescu, 2006, Crawford et al., 2006a, Hall, 2012, Muzio et al., 2011). The research data analysis makes a convincing argument to define the scope of project management practice and the career paths for project management practitioners, as these are deemed crucial to the way project management progresses to a full-time professional practice. Because of its significance to an organisation and to distinguish the practice from other disciplines of work, the participants supported the idea of full-time rather than part-time practice of project management.

With the underlying assumption that career paths influence the formation of an individual's professional identities and engagement in professionalisation initiatives (Karmel, 2013), this research study suggests that for project management to achieve professional status, it needs to be scoped as full-time work with a proper professional identity, professional qualifications, and career paths. These are crucial steps often observed when an occupation pushes towards professionalisation (Wilensky, 1964). Occupational closure using monopolistic provision of project management services is associated with the power and control model, which describes why professionalisation occurs (Curnow and McGonigle, 2006).

5.3.1.8 Theme: Personality traits

The personality traits theme is defined by the research participants' shared perspectives on the personal characteristics and behavioural competencies of project management practitioners that distinguish project management from other occupational groups. Many personality traits of project management practitioners, such as being people-oriented, passionate, and interactive, as well as having competencies in communication, and organisational and leadership skills, are not restricted to project management. From the outlook of professionalisation theory, identifying such traits creates a better understanding of the nature of project management practice that distinguishes project management from other occupations. In fact, personality forms one part of the overall traits of the attribute models of professionalisation theory (Thomas and Zwerman, 2011). According to Cavallone (1984), the personality traits of a project manager are basically a combination of personal attitude,

creativity, and cultural qualifications that contribute to his or her professional identity formation. Similarly, Creasy and Anantatmula (2013) drew attention "to the importance of project manager personality traits and dimensions with respect to executing projects effectively and successfully" (p. 37).

The results of this study highlighted the importance of project managers' personality traits in ensuring the success of projects. Communication skills, people skills, and organisational skills accounted for almost three-quarters of the reported personality traits deemed necessary for the practice of project management.

5.3.1.9 Section summary

The participants in general were not convinced of the prospects of success of the project management professionalisation journey. It is clear that this group needs other forms of motivation to keep them moving towards a professional identity. Research Question 2 looks at the aspects of motivation that could be key for an occupation to achieve professional status.

5.3.2 Motivation to attain professional identity

This second research question sought to understand the project managers' perceptions on whether or not project management could become a profession and how much effort they were prepared to commit to this journey to make it successful. It reflects the project managers' attitude to the change process; that is, from occupation to profession.

As described by Stryker and Burke (2000) and Morris (2013b), an individual's commitment is reflected in the extent to which the identity has become embedded in the individual's social structure, which, in turn, will reflect how much they will hold onto the role because of the perceived cost of losing it. The concept of commitment may explain the importance that the project manager places on his or her identity during the transition from occupation to profession. The three themes that relate the participants' motivation or commitment were accountability, emotional attachment, and cost association.

5.3.2.1 Theme: Accountability

A key aspect of commitment that the project managers displayed in this role is conforming to the PMI Code of Ethics and Professional Conduct. Bagraim (2003) described this sense of accountability as being committed to the profession because they feel they ought to do the right thing as demanded by the profession. Many of the participants agreed that holding the

project manager role would make them accountable for the project outcomes. Lo and Snape (2005) called it a "sense of duty or obligation" (p. 445) that a person has towards his profession.

These views reflect the project manager's autonomy in executing the role. As Funck (2012) described, "autonomy consists of the professional's opportunity to decide the technical content of work—that is to say, the ability to judge, control and plan one's own work as well as the freedom to deal with the client" (p. 3). This level of autonomy denotes an individual level of accountability, which is different from a state-sanctioned accountability in which the individual is answerable to the state for any misconduct (Funck, 2012), as is the case with doctors and lawyers (described in Chapter 2).

Project management has not reached the stage of state-level sanctioned accountability, which could only be made possible with the existence of professional regulation at national level. Participant 5 mentioned that "the management … technically rightfully they should take some portion of that accountability and responsibility". The overall responsibility for the project outcome should also be borne by the highest-ranking officers in the organisation, because the project manager would ultimately seek approval from them or escalate issues to them before executing the project. This is unlike doctors, who need not get management approval for dispensing treatment to patients. Participant 46 described, aptly, that working in an organisation, ultimately the CEO has to take the full responsibility for the service rendered by the employees, even though the employees are professionals.

Freidson (1988) added that "as long as a profession is free to decide on the technical content of work, its lack over the socio-economic terms of work will not significantly change its status and essential characteristics as a profession". Funck (2012, p. 4) suggested that full autonomy is unrealistic, because the professional need to balance various demands from society, clients, public interests, and professional judgment. It would seem, therefore, that project management displays individual-level autonomy and accountability within the criteria of professionalisation models. This level of autonomy is aligned with the concept of an organisational or corporate profession, as described by Evetts (2010) and Gaglio (2014).

5.3.2.2 Theme: Emotional attachment

The participants are generally attached to their work as project managers because of its perceived status and interesting challenges. The multifaceted nature of the work (e.g. the technical function and organisational strategy aspects) enables the participants to have well-

rounded skills in the course of managing projects. For example, Participant 40 was able to manage his vendors better by using project management methodology as a means of coordinating their work. In such instances, the participants are attracted to the practice of project management because of the value it brings to them.

Other ways in which the participants show their attachment to an identity is by investing in improving the skills required by the identity. Brown and Coupland (2015) described the case of professional rugby players who would keep themselves fit by going to the gymnasium and practising regularly. The same applies to project managers who seek continuous improvement through either formal education, continuous learning, or knowledge sharing, many of which are organised by the project management association.

5.3.2.3 Theme: Cost association

The final aspect of commitment is the cost associated with leaving the practice (Bagraim, 2003). As Morrow (1993) had indicated, commitment to professional identity is reflected in its relative strength in an individual's overall life. In the case of project management, the participants were generally keen to remain in this occupation because of the time and money they had invested in up-skilling themselves in this field, and the experience they gained performing the work. In addition, they felt satisfaction in performing the task of managing projects.

5.3.2.4 Section summary

The theoretical implications of these three dimensions of work commitment reveal a psychological state that describes the project managers' relationship with their profession and how much more project professionals are willing to do to promote their practice. Adopting this broad multidimensional perspective provides a complete understanding of project managers' associations with their practices (Meyer et al., 1993). It is a perspective that aligns with the views of project practitioners who have to meet and balance multiple objectives in product development projects (Hoegl and Wagner, 2005). And yet, although all three dimensions of commitment relate to a practitioner's likelihood of promoting and advancing the identity associated with project management practice, the nature of these associations might be quite different, depending on which dimension of commitment is salient.

Several project managers who displayed strong emotional attachment–commitment were proud to be associated with the project management profession because of the perceived

status and the interesting challenges associated with the work. Some practitioners also displayed their emotional attachment–commitment by regularly participating in and attending various project management related talks, conferences, and seminars organised by PMI. However, only one research participant showed these three dimensions of commitment towards project management practice. A majority of the research participants highlighted only one (61%) or two (35%) dimensions of commitment towards project management practice.

The commitment reflected by the participants is indicative of their strong affiliation towards project management as a specialised occupation, rather than towards the organisation that employs them. Hodgson and Paton's (2016) study of such affiliation or commitment discovered that project managers struggled to reconcile the tension between identifying themselves as the specialised occupation (a cosmopolitan identity) or as part of the organisation (local identity). However, that struggle was not significantly evident in this study.

The research data also showed that the participants view commitment from the perspective of their individual contribution. The participants gave no indications that they considered commitment from a group perspective. In fact, the closest any came to making such a suggestion was to put the onus on project management associations to provide guidance, such as by organising continuous learning opportunities and advocating for regulation of the profession. The challenge to the professionalisation of project management, therefore, is the lack of commitment at the grassroots level to advance the suggestions to an executable stage. A lack of leadership drive to initiate and sustain this momentum towards professional status also emerged from this group of participants.

5.3.3 Evaluation of the research findings

Chapter 2 examined the literature on the professionalisation of occupations and highlighted the different criteria used by the different authors when evaluating the validity of an occupation’s claim to a professional status. These criteria for appraising professional status fall into three main approaches: attribute models, process models, and power and market models. Table 5.1 maps the themes derived from the research data to the characteristics of the different professionalisation models.

Research Question 1 investigates the participants’ understanding of the construct of the project management professional identity. The project management group appears to have

attempted to meet the requirements of the models but does not fully meet all of the criteria. The participants were aware of the professional status identity construct and seventy-one per cent believed that project management could attain professional identity. However, individually, they were not confident they could meet some of the criteria; in particular, the setting of its own higher education, standardised body of knowledge, self-regulation, and regulation that is recognised at the national level.

Table 5.1: Professionalisation models categorised into themes

Item	Themes	Attribute Models	Process Models	Power and Market Models	Project Management Met/Unmet
1	Body of knowledge			Standardised body of accredited knowledge	Not fully met. The body of knowledge is not standardised.
2	Training and education	The profession determines its own standard of education and training. The student professional undergoes a more far-reaching adult socialisation experience than the learner in other occupations.	Formalised training develops, often in higher education settings.	Development of specific knowledge Special knowledge and skills Systemised/standardised training of practitioners	Not fully met. Education is not formalised in its own faculty in the higher education setting, but is embedded in other faculties.
3	Certificate and licensing	Licensing and admission boards are staffed by members of the profession. Professional practice is often legally recognised by some form of licensure.		Credentialing of practitioners to control market share	Not fully met. There is no formal licensing to practice project management, but there is certification.
4	Self and government regulation	The norms of practice enforced by the profession are more stringent than legal controls. Most legislation concerned with the profession is shaped by the profession.	A formal code of ethics is adopted or developed. State-sanctioned legislation reinforces and builds public identity and self-boundaries.		Not fully met. There is no self or government regulation, but there is a formal code of ethics.

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Item	Themes	Attribute Models	Process Models	Power and Market Models	Project Management Met/Unmet
5	Practitioner name and title	Members are more strongly identified and affiliated with the profession than are members of other occupations with theirs.	A professional association emerges or forms.		Not fully met. A professional association exists, but not all members feel strongly affiliated with project management as they do with their other roles, e.g. engineer.
6	Field of operation	The profession is more likely to be a terminal occupation. Members are loyal to the profession, and a higher proportion assert that if they had to do it over again they would again choose that type of work.	An occupation becomes full-time work.	Restricted supply of services Monopoly of services	Not fully met. Project management is practised part-time. Anyone could be given the title freely, hence there is no monopoly of service.
7	Others	The occupation gains in income, power, and prestige ranking, and can demand higher calibre students. The practitioner is relatively free of lay evaluation and control.			Not met. The project management role can be assigned to anyone deemed necessary by the organisation, and the work is constantly under the scrutiny of the projects' stakeholders.

One possible explanation for this lack of interest in achieving change could be answered by the results of Research Question 2. The participants generally felt committed to the occupation because of the way they felt accountable for the work they did, the pride in holding the position, and their investment in time and money to strengthen their skills in this trade. However, there is a shortage of cohesiveness in this group to organise themselves to collectively drive the solutions to cover the gaps they themselves have noticed. They seem to place the onus of leading this change on the professional associations. At the same time, they also acknowledged the professional association's role in Singapore in organising training and networking sessions for the members. The right trigger to set off a chain of reactive activities appears to be missing. In the words of Bresnen (2016), change requires "institutionalising new thinking about project management" (p. 335). The right trigger might be deep unhappiness among project managers about their current status, or perhaps some catastrophic event that might shake the foundations of project management. Only when such a trigger emerges may the group affected by it find the conviction to initiate the change.

Change rarely occurs in isolation, and much of the literature on change (Anderson and Anderson, 2010, Gill, 2002, Kotter, 1995) emphasises the importance of leadership in enacting it. Likewise, as Morris (2013a) articulated, "leadership is the activity of forming, shaping and giving voice to goals—establishing and 'selling' a vision; and motivating and influencing others to follow in the realisation of that vision—doing what needs to be done to fill out that vision and deliver it" (p. 199). What is lacking among project managers in the population sampled is a change champion who can motivate and assemble a critical mass of project practitioners to lead the change effort (Eisenbach, Watson, & Pillai, 1999, Kotter, 1995) towards the common goal of achieving professional status.

Like the ideas reiterated by Toor and Ofori (2008) about the need for a new project leadership style in the construction industry, a project management champion in Singapore would need to be passionate about the cause and be influential enough to garner sufficient support from the project manager population. As Pearce and Sims Jr (2002, p. 188) described, "shared leadership as a potentially important ingredient in explaining team effectiveness" has the potential to enact the changes required to achieve a common goal that could bolster conviction within the group.

In summary, this research study found that the requirements to facilitate the professionalisation of project management in Singapore are profound. There were mixed convictions among the 48 project managers interviewed about the development of their

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professional journeys and identities. The strength of their commitment varied from weak to strong and according to their seniority and work experience. Only a minority of practitioners felt strongly about the professionalisation journey, which this study illuminates as an essential requirement for a successful outcome, and necessary to underpin their professional journey and extend the time taken to achieve professional status and recognition. Although identified contextual factors constitute the essential elements for project management to achieve professional status, the variety of responses in this research study evince a lack of critical mass among practitioners; a lack of strong shared commitment to push the project management community to provide a higher level of support and to champion the cause of professionalisation of project management. Gaining full professional status would demand significant commitment and effort from the project management community and stakeholders, to work together to navigate these requirements and meet their respective agenda. As Participant 48, a local senior member of the government, succinctly related:

> Critical mass is important … So I think this is a bit of phased approach, first of all you need some numbers … Once you get the numbers, you want to push up the quality and qualifications … That is where you have the bargaining power … ”

5.4 Contributions to knowledge

The findings of this research study validate the appropriateness of drawing on the theories of professionalisation that were outlined in Chapter 2 in order to explore what professional identity entails in the real world of project work, how the professionalisation journey shapes project managers' professional identities, and what it would mean to the project managers if the practice were deemed professional. In general, the theories of professionalisation (Cleary, 2012, Curnow and McGonigle, 2006, Muzio et al., 2011, Paton et al., 2013, Thomas and Zwerman, 2011, Thomas and Thomas, 2014, Tobias, 2003) can be divided into three models:

1. Those that define the necessary traits or features of a profession (attribute models)
2. Those that describe the key processes or activities through which an occupation develops into a profession (process models)
3. Those that illustrate the forces that lead to the professionalisation of an occupation (power and market models).

5.4.1 New elements in professionalisation theory

Delving deeper, Table 5.2 maps these themes against the resulting three key models of professionalisation theories and illustrate new contributions to the theory, based on the research findings.

Table 5.2: Theoretical aspects of the project management professionalisation journey

Themes	Current models	New contribution
Body of knowledge	Power and market models	Development of unique and universal body of knowledge based on a theoretical foundation while considering domain and cultural perspectives
Training and education	Attribute models Process models Power and market models	Incorporate apprenticeship as part of training
Certification and licensing	Attribute models Power and market models	No further contribution
Self and government regulation	Attribute models Process models	No further contribution
Practitioner name or title	Attribute models Process models	No further contribution
Field of operation	Attribute models Process models Power and market models	No further contribution
Cost overhead of professionalisation	Not covered in any model	Cost overhead as a new characteristic of professionalisation
Personality traits	Not covered in any model	No further contribution
Accountability	Not covered in any model	Commitment as a new aspect of professionalisation
Emotional attachment	Not covered in any model	
Cost association	Not covered in any model	

The study found all three models of professionalisation (attribute models, process models, and power and market models) to be useful in enhancing understanding of the project management professionalisation journey. The models do not compete, but complement one another in emphasising the different aspects of the professional identity construct. In addition, the commitment and cost overhead theme contributed a new dimension to understanding professionalisation.

Figure 5.1 shows that the existing three models of professionalisation provide the foundation for the construction of project management professional identity. Building on the models, the research findings indicate two other contributing factors (commitment and cost overheads) that would help drive the evolution in status from occupation to profession.

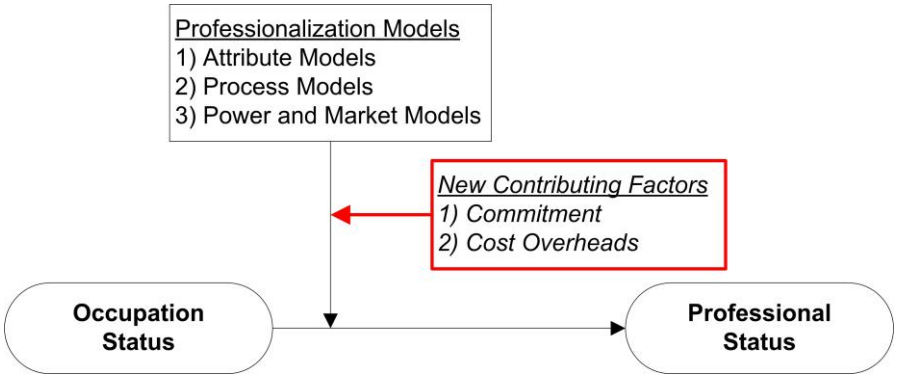

Figure 5.1: Contribution to professionalisation models

By combining these three professionalisation models and the new contributing factors, this study identifies the essential traits of project management practice, the relevant processes that could transform the occupation into a profession, and the potential forces that could lead to its professionalisation. This evidence explains project management's struggle to secure professional status, the practitioners' perceptions of the essential elements for attaining professional status, and what constitutes their professional identity.

One new aspect here, however, is the bringing together of the three key models of professionalisation theories—attribute models, process models, and power and market models—rather than considering them individually, to explore various aspects, states, and stages of the project management professionalisation journey. In addition, this study has also demonstrated new contributions in the following areas:

- The inclusion of domain and cultural perspectives when developing a unique and universal body of knowledge with theoretical foundations
- The integration of apprenticeship as part of training for professionals
- The incorporation of cost overheads as part of the professionalisation process, as they reflect the members' commitment to any potential costs incurred
- Group commitment to the journey in gaining professional identity.

There are a number of justifications for the proposed approach to project management professionalisation through multiple theoretical perspectives: calls for more extensive

research; the emergence of ‘projectification’; the value of applying different perspectives to a study; and the growing demand for skilled and qualified practitioners.

Firstly, this approach answers calls for researchers to dig ‘wider and deeper’ in order to enhance insight into project practices and management (e.g. Hallin and Karrbom-Gustavsson, 2010, Sergi, 2012). By combining multiple theoretical perspectives on professionalisation, the candidate was able to demonstrate that certain practices of project managers have not been specifically highlighted in existing literature. These practices include the importance of professional commitment to achieving project management professionalisation, together with some essential elements for the professionalisation journey, such as cost overheads.

Without doubt, projects are becoming increasingly dynamic and multifaceted. They involve multiple stakeholders with diverse interests beyond the hierarchical lines of authority, fronting rapid technological advancements, distributed knowledge bases, and new socio-economic challenges (Ahsan et al., 2013, Hanisch and Wald, 2011, Schilirò, 2012, Söderlund, 2011, USDIBR, 2007). This research study has demonstrated the benefit of combining the different perspectives and theoretical lenses of professionalisation theory, as it adds perspectives that are relevant to project managers’ perceptions of the professionalisation journey in Singapore.

Such an approach is essential in developing a more explicit understanding of project manager careers and professional identity, in light of the present tight labour markets that demand skilled and qualified project managers. It also addresses the requirement for a common theoretical basis for project management, due to the growing percentage of the global workforce that is involved in project-based careers and the shift from a local to a global orientation, which necessitates standardisation and consistency in project practices.

Evidence from this research provides a better insight into what it means to be a professional in the real world of project management practice. This insight includes the importance of defining the field of operation for project management, in order to control the exclusive right over the project manager title and to identify essential personality traits that characterise a project manager. The candidate’s contribution to the theoretical approach that combines multiple theories is particularly well suited to pursuing this investigation of the social dynamics of project work and management, as it opens the door to ontological reflection on and process-oriented perspectives of the nature of project practices. These reflections and perspectives could interest both researchers and practitioners alike

(Packendorff et al., 2014, Sergi, 2012). They include a situated conception of projects and a focus on actual project practices, in order to develop a finer understanding of how the professionalization journey emerges and unfolds over time (Sergi, 2012), and a process-oriented analysis of project leadership work that is represented as a series of social activities and events in which project stakeholders and organizational contexts are all constantly and mutually interacting in flux (Packendorff et al., 2014).

The second justification for approaching project management professionalisation through multiple theoretical perspectives is the emergence of the notion of projectification (Maylor et al., 2006, Midler, 1995), as projects have become a common form of organisational methodology in all sectors of the economy during recent decades. According to Packendorff and Lindgren (2014), a focus on the process of projectification that employs a broader view of projects, and project-based organisation as a cultural and discursive phenomenon, would benefit project research because of the increased understanding of how societal discourse, organisational culture, and the construction of individual identity are inter-related in the structure of project work. As posited by Suddaby and Viale (2011), professionals seem to adapt well and conform to the norms of the organisation while introducing social change within it; which, in this case, is projectification.

Thirdly, this study has highlighted the value of employing a number of different perspectives on project management practice. These perspectives connect the dynamics of project management practice with other disciplines (such as economics, finance, law, computer science, and organisational management) and focus on the cultural and discursive processes in a society where project-based work is performed. They aim to provide guidance on how to best design and implement solutions that correspond to the many challenges facing present day projects, and to enhance the understanding of the importance of project management among the various project management stakeholders. These stakeholders include academics, researchers, consultants, professional associations, organisations, governments, project management practitioners, and the public.

The fourth justification for approaching project management professionalisation through multiple theoretical perspectives is the growing demand for skilled and qualified project managers (Light, 2013, PMI, 2013a). Skilled project managers is one of the main factors influencing the final outcome of projects (Ahsan et al., 2013, KPMG, 2013). This in turn necessitates the identification and analysis of essential project manager skills for managing projects (Keil et al., 2013). Human skills have already been identified as essential

for the success of project management; Alam et al. (2010) found that there is a relationship between project managers' personalities and the success of software development projects. To understand the professionalisation of project management further, this research shows that it is essential to understand the contextual and situational conceptions of project work; the dispositions of project managers from multiple perspectives; and the theoretical lenses that systematically identify, characterise, and differentiate project management practice and that offer new insights into various areas. These areas include: (a) skills, competencies, and a body of knowledge requirements; (b) training and education programs; (c) careers and career models and trajectories; and (d) challenges, constraints, requirements, and expectations of various project stakeholders. Insight into these areas will help to develop a finer understanding of what happens in projects, the complex balancing work that is required as projects progress, and accounts of projects that are closer to actual experiences, as these endeavours emerge and unfold over time (Sergi, 2012). Furthermore, this practice-based study of project managers' reflections about their journeys towards professional identity is one way of continuing to make the understanding of projects more socially sensitive and more coherent across multiple levels (Hällgren and Lindahl, 2012). In addition, by investing in developing project management competences and career growth, more people will be attracted to this occupation and underperforming project managers will relinquish this role (Ekrot et al., 2016).

Finally, this research also introduced the element of individual and collective commitment necessary for project managers to propel this occupation to the level of professional status. Without such commitment, the journey will not succeed. Yet, project managers' commitment towards professionalisation differs depending on which dimension of commitment is salient. According to Stryker (2007), "commitment affects identity hierarchies and these in turn affect [individuals'] role choice behaviour" (p. 1094). The results of this study are in accord with the findings of Burke and Reitzes (1991), who suggest that individuals who have a strong commitment to their identity will "pursue lines of activity which sustain and support their identities to the extent they are committed to those identities" (p. 250). This implies that project managers need to be active agents who control their own identity processes. Their sense of obligation, including accepting the cost overheads, emotional attachment, and their deep investment with project management practice, will motivate them to maintain and advance their professional identities. Those with stronger commitments will work harder to maintain their professional identities. Furthermore,

establishing a strong, self-chosen, and flexible professional identity seems like an important contribution to professional success, social adaptation, and psychological well-being (Skorikov and Vondracek, 2011). In addition, to be a true project management professional, it is necessary to invest a substantial amount of time and energy into learning and practising professional knowledge and skills (Wang and Armstrong, 2004).

As a group, the members of this project management group in Singapore would benefit from having an enthusiastic leader to give direction and guidance and rally the individuals in the group to address the issues that divide them, such as control over the use of the project management title, and to establish the agreed identity for the profession. This level of commitment was not evident within the research cohort and could be an important element in any emerging profession.

5.4.2 New perspective on the existing professionalisation theory

This study also observed that not all of the elements in the three existing professionalisation models appear to be necessary and some of them overlap. Table 5.3 shows the relevance of each component in the current globalised and knowledge-driven economy, as uncovered during the literature review and data analysis.

Table 5.3: Elements of the professionalisation models and their relevance

S/N	Elements	Models	Relevance
1	Knowledge base • Develops specific knowledge • Standardised body of accredited knowledge	Power and market models	Relevant
2	Education and training • Profession determines its own standard of education and training • Education/training often occurs in higher education settings	Attribute models Power and market models Process models	Relevant
3	Adult socialisation • Student professional undergoes more far-reaching adult socialisation experience than learner in other occupations	Attribute models	Relevant
4	Licensing and regulation • Professional practice often legally recognised by some form of licensure • Most legislation concerned with the	Attribute models Power and market models	Relevant

	profession is shaped by the profession • Norms of practice enforced by profession are more stringent than legal controls • Licensing and admission boards staffed by members of the profession • Licensing restricts supply, leads to monopoly of service		
5	Ethics • Formal code of ethics is adopted or developed	Process models	Relevant
6	State-sanctioned legitimacy • State-sanctioned legislation reinforces and builds public identity and self-boundaries	Process models	Relevant
7	Affiliation with profession • Members more strongly identified and affiliated with their profession than are members of other occupations • Members more likely to be in a terminal occupation • Members are loyal to the profession • A higher proportion than members of other professions would choose same type of work again	Attribute models	Relevant
8	Professional association • Emergence or formation of a professional association	Process models	Relevant
9	Prestige • Occupation gains in income, power, and prestige ranking • Can demand higher calibre students	Attribute models	Relevant
10	Extent of work • Occupation becomes full-time work	Process models	Not relevant
11	Autonomy • Practitioner is relatively free of lay evaluation and control	Attribute models	Not relevant

5.4.2.1 Knowledge

Developing a standardised body of knowledge is quintessential to any profession as it represents two key factors:

1. The knowledge is unique to the profession, therefore only the profession is able to determine its content, which is scientific and evidence-based (Brante, 2013).
2. The same knowledge is shared among the members to ensure they have the same understanding and, hence, consistent application of the knowledge.

Ironically, possession of a standardised body of knowledge is not specified in the attribute models and process models. It appears only in power and market models, which emerged after the other two, and reflects that changes in the economic landscape will shape the professionalisation of any occupation. In the case of project management in the current knowledge-based economy, having a standardised body of accredited knowledge is important. In addition, the lack of having standardised body of knowledge will impact the profession's mobility across different countries. A study by Allsop and colleagues (2009) on the engineering, medical and psychological professions clearly showed that a standard body of knowledge allows professionals the freedom to choose where they work. It was found that psychologists are deprived of mobility because they do not have an internationally recognised knowledge base. Therefore, having a standardised body of knowledge that is recognised internationally is important in creating mobility for the profession.

5.4.2.2 Education and training

Because the profession is the knowledge authority, it is only natural that the profession should determine the standard of education and training for members and potential members. Sjöstrand (2013) posited that higher education is advocated for professions that are theory-based (as in the case of project management) and not craftsmanship-based. In addition, the requirement for higher education acts as a filter to allow better calibre candidates into the profession and portray the profession as learned and having high standards (Anderson et al., 2005). Therefore, if an occupation is to become a profession, it is important that its education is set at a higher level.

5.4.2.3 Adult socialisation

Professionals are expected to act independently and to use discretion in executing their role. In consequence, they need close supervision at the start of their career to ensure that they are able to perform as expected of them. Shulman (1998), in his study of student teachers, indicated that extended learning to link theory to practice comes in the form of learning through experience, which can be formidable, as academic knowledge is far from sufficient

in enabling students to practice independently. However, learning through experience is indispensable. Therefore, supervision, apprenticeship, and mentoring are necessary as part of their learning and professionalisation.

5.4.2.4 Licensing and regulation

Licensing ensures that only qualified individuals can practice the trade. Through licensing, the profession can protect its qualification as a profession by preventing the unqualified from practising (Svensson, 2015). However, Macdonald (1995) posited, there should be a balance between being too lenient, downgrading the value of membership, and being too strict, leading to the formation of a rival body by those who are rejected. In addition, the group will self-govern by implementing stringent legal control in order to gain public trust in the profession. This is seen in the case of legal associations, which debar lawyers who do not uphold the expected ethical standard (Baron and Corbin, 2014). Furthermore, members of the profession rather than an external party should also manage the administration of licensing, including evaluation and approval, in order to safeguard the interests of the group and to ensure that only the qualified can be part of the profession. The implication of regulating a profession is that it protects the practice from an inflow of talents from other countries, but the reverse is also true, whereby the profession cannot easily practice in another country without attaining the local license, hence safeguarding the local interest (Allsop, Bourgeault, Evetts, Le Bianic, Jones, et al., 2009).

5.4.2.5 Ethics

A formal code of ethics is necessary to instruct the practitioners to conduct themselves in accordance with the clients' expectations (Liaschenko and Peter, 2004) and it usually promotes high standards on the part of the professional. It also serves as a reference for what the client can expect from practitioners. Furthermore, the members can self-evaluate based on the benchmark set by the code of ethics (Weisberg and Duffin, 1995).

5.4.2.6 State-sanctioned legitimacy

Acquiring support from the government is essential in many countries, including Singapore, whereby the legislature can control the ability of the profession to practice, based on proper authorisation from an assigned government body, for example through licensing that is disbursed through the professional association. The state provides the legitimacy, for

example, in setting the standards of practice and in acting as guarantor for professional education (Evett 2013). The state regulates the conversion of status from occupation to profession by setting the professional jurisdiction.

5.4.2.7 Affiliation with profession

In cases where members of the profession hold more than one role, for example a doctor who is also an administrator, the members will identify themselves with the profession first, before the other roles. The affiliation with the profession is strong when the individual feels committed to the professional identity and the identity is salient to the individual. Therefore, with the sense of attachment to the identity, it would appear costly to the members to remove themselves from the profession and it will likely be their terminal occupation.

5.4.2.8 Professional association

As described in the other elements, the existence of a professional association is necessary for the profession in many ways, such as in organising continuous education, setting standards for the profession, and administering the issue of licences. The emergence of the professional association is necessary to establish professional status.

5.4.2.9 Prestige

Due to the restrictions on entry that is controlled by both higher education and licensing, the profession will more easily be able to demand higher income, gain power, and increase its prestige ranking. As a result, there will be greater demand to enter the profession.

5.4.2.10 Extent of work

In the current economic situation, more practitioners, even in traditional professions such as medicine, necessarily hold multiple roles. There are members of the profession who do not hold the position full-time, but this does not mean the occupation is any less of a profession, because it does uphold other components of the professionalisation models, such as having a standardised body of accredited knowledge. Therefore, the requirement of attribute models that the occupation becomes full-time work is no longer applicable.

5.4.2.11 Autonomy

With the ease in accessing knowledge through the Internet and other means, more consumers are now familiar with knowledge that is usually kept within the confines of the profession.

For example, in Singapore, more people are representing themselves in court, some armed with knowledge about legal proceedings. In one such case, a woman won a divorce proceeding after going against two well-established law firms (Chan, 2009). In medicine, doctors are engaging patients by facilitation, through helping patients "make effective treatment choices for themselves within available resources" since the patients already have the necessary information (Neuberger, 2000, p. 9), rather than by pure prescription. Therefore, the notion that professionals are free from lay evaluation is no longer relevant in the current knowledge-based economy.

The data analysis and the elements of the proposed professionalisation model point to the project management occupation in Singapore still having a long journey to achieve professional status. For example, it has still to develop a unified body of knowledge with a theoretical foundation covering various domains that take into account different organisational cultures, and obtain government support to regulate the practice. The critical missing element is sufficient motivation through member commitment and strong leadership.

To summarise, this research offers a unique practitioner's perspective that specifically characterises project managers as unique employees (Pinto and Kharbanda, 1995, Viaene and Van den Bunder, 2011) with one of the most challenging jobs in any organisation, requiring broad understanding of the various areas that must be coordinated and strong personality traits, skills, and competencies (Ahsan et al., 2013, Brill, Bishop, & Walker, 2006). This is particularly true for decentralised organisation structures with project portfolios that cross industries and geographic borders (PMI, 2013a). These findings reflect and confirm the conclusions of prior research that a lack of understanding of the nature of work in projects, deficient definitions of project management practice, and a lack of research and knowledge of project management (Koskela and Howell, 2002, Kwak and Anbari, 2009) have hampered its effective evolution. However, several researchers have also highlighted the significance of studying professions as institutions and connecting professionalisation to broader patterns of institutionalisation. Changes to the political economy in recent years have driven various project stakeholders to acknowledge the importance of understanding the broader role of professions in processes of institutional change, with a potential role for corporate entities in this process of professionalisation (Muzio et al., 2013, Paton et al., 2013, Thomas and Thomas, 2014).

5.5 Limitations of the research

This interpretive phenomenological research study, akin to most qualitative methodologies, has produced rich and deep insights into the experiences of project managers' professionalisation journeys. Research participants comprised a relatively balanced representation of project practitioners from various industries and organisational levels. Nonetheless, there were some limitations, which should be considered when reviewing the findings and designing future research studies.

The first limitation pertains to research participants' changing perspectives of project management practices over time, which may have limited the reflection of their lived experiences in project management practice. Several participants (Participants 32, 33, 34, 35, 40, 43, 45, 46 and 47) with more than 20 years of work experience had advanced to upper management positions within the project organisation. Due to the limitations of memory over the time between "the event that is being reported and that of the act of narrating [it]" (Margolin, 2001, p. 195), the final interpretation and representation of professional identity in the world of IT projects may have been incomplete.

Secondly, this research study has not examined the impacts of culture, gender, and age on project management practice. The research participants for this research study were quite diverse; two were foreign nationals working in Singapore (Participants 01 and 11), two were junior practising project managers (Participants 09 and 17), two were managing a team of project managers (Participants 21 and 25), two held academic teaching positions (Participants 39 and 46) and others held upper management positions (Participants 35, 40, 43, 45 and 47) within the project organisation. Approximately twenty per cent of the research participants involved in this study were female. Stratification to account for these differences might produce findings that are more useful for specific sets of characteristics.

Thirdly, qualitative research generally suffers from a lack of generalizability. To seek to understand personal experiences the sampling method was purposive and the sample size small. As such, the results of this research may not be generalizable to other related knowledge-based occupations; nonetheless, they enable us to gain insight into the lived experience of project managers, the meaning of that experience, and how they make sense of it. In addition, the interpretation of the interview data from this study is a representation of the phenomenon of professional identity in the world of projects, as narrated by the research participants. A different profile of research participants may tell different stories, generating different interpretations and recommendations for practice.

Other limitations include the candidate's limited experience in building and developing instruments and measurement tools, which might have affected the rigour of the interview guide. Furthermore, the quality of data collection and analysis depended on the candidate's ability to interpret the meaning of research participants' experiences.

5.6 Recommendations for future research work

Research and literature on the relevance of professional identity in project management are not developed and integrated consistently, compared to other practices such as teaching, which have emerged as separate areas of professionalisation (Beauchamp and Thomas, 2009, Beijaard et al., 2004). While acknowledging the limitations outlined in the previous section, future research may consider the following potential areas of study:

- Explore the lived experiences of non-English-speaking project managers and/or less experienced practitioners. This would determine whether the same common characteristics and findings in this research are also applicable to individuals from diverse backgrounds.
- Compare the practices of project managers by culture, gender, and age to determine if there are any significant differences in the lived experiences of project managers, the significance of those experiences to them, and how they make sense of them.
- Enhance the conceptual framework from this research through quantitative modelling to determine the strength of relationships among the three identified characteristics of project managers' professional identities; namely, the practitioner name or title, field of operation, and personality traits.
- Conduct the same research study in different economic and cultural settings, considering that this research study was conducted in a small island country in Asia with a stable economy and a diverse multicultural and multi-ethnic society.
- Explore how practitioners' previous work experiences and attitudes towards lifelong learning can contribute more positively to the development of their professional identity.

5.7 Conclusion

The research candidate has made several important contributions to this subject, especially in understanding why the existing theories have not sufficiently explained why certain occupations have not received professional status despite efforts put in by the members to

emulate characteristics of established professions like medicine and law. Firstly, the findings of this study have greatly enhanced the understanding of the characteristics that influence and shape the developmental journey of project managers' identities as part of the process of professionalisation. The research interviews confirm that the lack of jurisdiction over the practice of project management has had a significant impact on the slow progress of project management professionalisation in Singapore. Drange and Vågan (2013) aptly described its influence on the professionalisation process: "the commitment to credentials [is] quintessential for career development [and] is also strengthened by regulations from government and professional associations" (p. 5). The findings also demonstrate that the requirements to achieve project management professionalisation in Singapore are extensive. Thus, this research study suggests that obtaining the status of a full profession will require significant commitment and effort from the project management community and related stakeholders to work together to meet these essential requirements for attaining professional status. Alternatively, project management could take on professional status under the concept of the organisational professional, where the traditional professional definition is integrated with organisation logic to create a new breed of professionals suiting the current capitalist system (Saks 2016). Large organisations are also becoming the dominant location in which professionals practice (Muzio and Kirkpatrick, 2011).

Secondly, this research contributes towards combining different aspects of professionalisation theory, as it adds to the perspectives that are relevant to approaching the project managers' perceptions of the professionalisation journey in Singapore. Evidence from the research has provided insight into and refined the awareness of what it means to be a professional in the real world of project management practice, including the importance of defining the field of operation in order to control the exclusive right to use the project manager title. It also identified the essential personality traits that characterise a project manager. An approach that combines multiple theoretical perspectives is particularly well suited to pursue this investigation into the social dynamics of project work and management, as it opens the door to ontological reflection and process-oriented perspectives on the nature of project practices that could interest both researchers and practitioners alike (Packendorff et al., 2014, Sergi, 2012).

Thirdly, this research shows that to develop a finer understanding of project management professionalisation it is essential to understand the situated conceptions of project work from multiple viewpoints and theoretical lenses that systematically identify,

characterise, and differentiate project management practice. Furthermore, this practice-based situated study of project managers' reflections about their journeys towards professional identity is one way of continuing to make the understanding of projects more socially sensitive and more coherent across multiple levels (Hällgren and Lindahl, 2012).

Fourthly, the socio-economic implications of this research study are quite significant in view of the importance of a globally competitive workforce in Singapore and many developing nations (Gopinathan, 2007, Hilton, 2008). In addition, Singapore will need a rich pool of globally competitive project managers to spearhead the numerous projects that add value to the economy and to society. Looking ahead, the stakes are high, as not having the right local project management talent readily available can diminish Singapore's global competitiveness and economic growth (PMI, 2013c). These constraints are further challenged by Singapore's low fertility rate, shrinking workforce, and ageing population (Jones, 2012); its approach to sustaining economic competitiveness by reducing reliance on foreign talent and increasing the proportion of workforce in professional, managerial, executive, and technical occupations (Sung, 2012); and the globally increasing growth and demand for project managers (PMI, 2013c).

The fifth significant contribution was underlining the importance of member commitment and shared effort to proceed to professional grade. There needs to be sufficient grounds well within the group to support the effort to make the necessary changes to achieve professional status. Commitment from the majority of the group is not only necessary, but undeniably crucial for this achievement. As with any movement involving many others, the group needs a leader or a small group of champions from within to drive it in the right direction and to sustain support from the members. As proposed by a number of participants in this research, this champion could come from the professional association. Only with unity among the practitioners and committed leadership will the group put in the effort needed to attain professional status. Without such unity, there will be insufficient momentum to drive the journey to its completion. This has already been highlighted by Zwerman et al. (2004b), who stated that all members of the occupation need to be resolute and work together to achieve the necessary recognition.

Even so, this may not be enough to change the context in Singapore. Along with any internal effort from the group, there should also be legislative support from the government. This can be achieved only through enough public awareness on the importance of having the legal backing that would enable the occupation to regulate itself. Unfortunately, however,

such moves are usually triggered by negative events that would give enough publicity to this need, and generally follow only some significant, publicly highlighted disasters. As Bucher, Chreim, Langley, and Reay (2016) indicated in their study on the professional work boundaries, one of the reasons that nursing had a harder time to establish its own boundary within the healthcare field is that the Ministry of Health supported the physicians' claim that the physician should have the final say in patient care. This notion was further emphasised by Joensen, Kousgaard, and Burau (2014), who reflected that "the relationship between the state and organised groups is a salient issue in the sociology of professions" (p. 1). While one would not wish for a disaster for the legal system to take notice of the need for regulation, it might certainly accelerate the process.

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APPENDIX 1: Approval Letter from PMI Singapore Chapter

Project Management Institute Singapore Chapter

73 Bukit Timah Road, #04-01 Rex House,Singapore 229832

Making project management in dispensable for business results. TM

18th August 2008

Rozinah Bachik
130 Edgedale Plains
#17-18
Singapore 820130

Dear Ms Bachik,

We understand that you requested permission from our organization, "Project Management Institute Singapore Chapter" to conduct a qualitative research for your doctoral dissertation at the University of South Australia on professionalization theory using project manager as a case study. We hereby grant permission for the gathering of data through interviews of our members.

We will support your work by assisting you to send out invitations to our members to participate in your research. We will also help publicise your research effort to our members in our newsletters.

In return, we wish to obtain your commitment to keep our member's name and position anonymous, and the information collected is to remain confidential.

In addition, we would like to have a copy of your final report to be extended to us upon completion of the research.

Please do not hesitate to contact me or Umesh Ursekar should you have any queries in relation to the above.

Yours sincerely,

[redacted]

Alex Siow
President

University of South Australia

APPENDIX 2: List of Interview Questions

Warm up questions:

- Do you recall how your started your career as a project manager?
- Can you tell me your experience in project management?

Main questions:

IQ1. Do you consider project management practitioners as professionals and how do you define being a professional means?

[Comments: first question is broad and open ended]

IQ2. Have you ever met any individual who does not qualify as a project manager but claims to be one? If possible, kindly elaborate.

[Comments: probes to encourage further elaboration]

IQ3. Do you consider the current standard bodies of knowledge sufficient and unique for project management professionalisation?

IQ4. To what extent do you think that project management practitioners are able to operate/work autonomously when executing projects as opposed to having to constantly check with his or her superior?

IQ5. What form of training preparation do you think project management practitioners need in order to prepare themselves for this role of being a professional?

IQ6. Do you think there is sufficient project management related education made available for project management practitioners in Singapore?

IQ7. What kind of certification process should exist to keep unqualified project managers out and should there be any gatekeeping process or procedure?

IQ8. Do you feel that project management professional association helps to promote project management profession (occupation) in the eyes of public?

IQ9. How much more should project management practitioners do or need to do, to promote project management professionalisation? If possible, kindly elaborate.

[Comments: probes to encourage further elaboration]

IQ10. What do you perceive as likely success or essential elements in this journey towards project management professionalisation? If possible, kindly elaborate.

[Comments: last question provides a conclusion to the research interview]

University of South Australia

APPENDIX 3: Information Sheet

University of South Australia

International Graduate School of Business

Research Title: The project manager's journey to gain professional identity

Researcher: Rozinah Bachik, MSc
98292606 (mobile number)

Supervisor: Dr Margaret Patrickson

We would like to invite you to participate in our research on the professionalisation of project manager.

This research aims at understanding the experience of project managers in their struggle to gain professional recognition based on various factors, one of them being their competency in performing their role with autonomy.

The participants of this research will be interviewed by me for approximately an hour. Participants are encouraged to be candid in their response, their identity will be kept strictly confidential and any referral to the content of the data will be made anonymously. The participant's particulars will be kept separately and they will be identified through codes. The data collected will be in a safe accessible only by the researcher and the data will be purged after 5 years.

Interviews will be held at locations convenient to the participant, conducive to the purpose of the research, and not harm either party in any way. The interviews will be audio-recorded.

The tape is raw data and will be securely retained for 5 years with access only by the researcher. The identity of the interviewees may be masked, if requested.

The participants have the right to withdraw from participating at any time without affecting their membership position in the Project Management Institute Singapore Chapter.

Amalgamated research findings will be made available to the Project Management Institute Singapore Chapter for their discretion to disseminate it to their members.

The University of Australia's Human Research Ethics Committee has reviewed this study. Should you wish to discuss the project with someone not directly involved, in particular in relation to matters concerning policies, information about the conduct of the study, or your rights as a participant, please contact

Ms Vicki Allen, Executive Officer
Human Research Ethics Committee
University of South Australia
GPO BOX 2471
Adelaide SA 5000
Email: Vicki.Allen@unisa.edu.au
Tel: +61 8 8302 3118

Thank you.

University of South Australia

APPENDIX 4: Consent Form

Project Title The project manager's journey to gain professional identity
Researcher's name Rozinah Bachik
Supervisor's name Dr Margaret Patrickson

- I have read the Participant Information Sheet, and the nature and the purpose of the research project has been explained to me. I understand and agree to take part.
- I understand that I may not directly benefit from taking part in the project.
- I understand that I can withdraw from the study at any stage and that this will not affect my status now or in the future.
- I confirm that I am over 18 years of age.
- I understand that I will be audiotaped during the study
- I understand that the tape will be stored in a safe, only assessable by the researcher and will be purged after 5 years.

Name of Participant.....

Signed.....

Dated.....

I have explained the study to subject and consider that he/she understands what is involved.

Researcher's signature and date.....

APPENDIX 5: NVivo Free Nodes Illustration

Hierarchical Name	Nickname	Aggregate	User Assigned Color
Nodes\\Apprenticeship should be part of training	Education—Apprenticeship	No	Green
Nodes\\Auditing is necessary for PM	Audit	No	None
Nodes\\Autonomy		No	None
Nodes\\Basic education for PM	Education—Basic	No	None
Nodes\\Certifcation is a plus point		No	None
Nodes\\Certificate does not reflect a good PM	Certificate—Not good reflection	No	None
Nodes\\Certificate gets the job interview		No	None
Nodes\\Certification criteria		No	None
Nodes\\Certification required to be a PM.	Certificate—required	No	None
Nodes\\Characteristics of a Project Manager	PM—characteristics	No	None
Nodes\\Clock hours to retain certification	Certification—clock hours	No	None
Nodes\\Code of conduct for medicine	Code of conduct—Medicine	No	None
Nodes\\Code of conduct for PM	Code of conduct—PM	No	None
Nodes\\Company determine the PM title	Title—Company determine	No	None
Nodes\\Company has no standard methodology		No	None
Nodes\\Company has PM standard but not followed	Standard—company has but not followed	No	Green
Nodes\\Company to create environment for PM to practice	Practice—company to create environment	No	None
Nodes\\Company-specific PM methodology	Standard—company specific	No	None
Nodes\\Complexity of IT projects		No	None
Nodes\\Continuous education is important	Education—continuous is important	No	None
Nodes\\Cost of professionalising		No	None
Nodes\\Definition of PM	PM—definition	No	None
Nodes\\Definition of professional	Professional—definition	No	None
Nodes\\Deprofessionalisation		No	None
Nodes\\Devalue in PM		No	None

Hierarchical Name	Nickname	Aggregate	User Assigned Color
Nodes\\Difficult to find good PM		No	None
Nodes\\Does end-to-end work	PM role—perform end-to-end work	No	None
Nodes\\Domain knowledge is not required	Knowledge—domain is not required	No	None
Nodes\\Ethics is important	Ethics	No	None
Nodes\\Gatekeeping necessary	Gatekeeping	No	None
Nodes\\Good PM without certification	Certification—good PM without certification	No	None
Nodes\\Good to have PM training but not necessary	Education—good to have but not necessary	No	None
Nodes\\Government role in professionalisation	Professionalisation—government role	No	None
Nodes\\High education does not reflect it will make a good PM	Education—high edu will note make good PM	No	None
Nodes\\High education is not important to be PM	Education—high edu is not important	No	None
Nodes\\Important aspect of managing a project that a PM adds value	Value—PM value	No	None
Nodes\\Liability on company		No	None
Nodes\\Licensing		No	None
Nodes\\Licensing PM		No	None
Nodes\\Management of PM		No	None
Nodes\\Market regulates the profession		No	None
Nodes\\No need specialisation	Specialisation—not required	No	None
Nodes\\No standard PM training	Education—no standard	No	None
Nodes\\No training on PM before they were assigned the role	Education—no training prior to taking PM role	No	None
Nodes\\No, PM is not a professional	Professional—PM not a professional	No	None
Nodes\\Okay again, that’s what the first thing that I mentioned. It’s skill-wise. Everybody has the skills for project management. So it’s a different level of skills you would require for a different type of		No	None

Hierarchical Name	Nickname	Aggregate	User Assigned Color
project. If you ask me to run a large program, I ma			
Nodes\\Other profession—Accounting		No	None
Nodes\\Other profession—Engineering		No	None
Nodes\\Other Profession—Medical		No	None
Nodes\\Other profession—Nursing		No	None
Nodes\\PM are doing the work full-time	Time—PM are doing the work full-time	No	None
Nodes\\PM certification does not impact being a PM	Certification—does not impact being a PM	No	None
Nodes\\PM certified doing a good job	Certification—certified PM doing a good job	No	None
Nodes\\PM does not behave professionally	Professional—PM does not behave professionally	No	None
Nodes\\PM image is individual and not tied to profession		No	None
Nodes\\PM is a career progression		No	None
Nodes\\PM is already a professional	Professional—PM already a professional	No	None
Nodes\\PM is an overhead that can be ommitted		No	None
Nodes\\PM is dynamic		No	None
Nodes\\PM members self regulates		No	None
Nodes\\PM Methodology is beneficial	Standard—PM methodology is beneficial	No	None
Nodes\\PM methodology is common sense	Standard—PM methodology is common sense	No	None
Nodes\\PM must be subject matter expert	Knowledge—PM must be subject matter expert	No	None
Nodes\\PM needs domain knowledge	Knowledge—PM needs domain knowledge	No	None
Nodes\\PM needs proper education		No	None
Nodes\\PM needs to know the business aspects	Education—business aspects	No	None
Nodes\\PM Quality is important		No	None

Hierarchical Name	Nickname	Aggregate	User Assigned Color
Nodes\\PM role is not full-time		No	None
Nodes\\PM should be liable for his errors	Responsibility—PM should be liable	No	None
Nodes\\PM should have specialisation	Specialisation—PM should have specialisation	No	None
Nodes\\PM should spend more time doing PM work	Time—PM should spend more time doing PM work	No	None
Nodes\\PM skills is portable across industry	Skills—PM skills is portable across industry	No	None
Nodes\\PM title is perceived as prestigious	Title—PM title is perceived as prestigious	No	None
Nodes\\PM title not clearly defined	Title—not clearly defined	No	None
Nodes\\PM who doesn't qualify as PM but claims to be one	Title—not qualified but claimed to be one	No	None
Nodes\\PMBoK not sufficient, experience required	Experience—PMBoK is not sufficient, experience required	No	None
Nodes\\PMI		No	None
Nodes\\PMI certification not foolproof	Certification—not foolproof	No	None
Nodes\\PMI or SPMI helps promote the profession	Promote—SPMI to help promote the profession	No	None
Nodes\\Professional body is important		No	None
Nodes\\Project Manager Body of Knowledge	Standard—PMBoK	No	None
Nodes\\Project should have different roles	Title—project should have different roles	No	None
Nodes\\Promotion of the profession	Promotion—of the profession	No	None
Nodes\\Running project is like running a business		No	None
Nodes\\Started as PM apprentice	Experience—start PM as apprentice	No	None
Nodes\\Sufficient PM-related education in Singapore	Education—sufficient availability in Singapore	No	None
Nodes\\take up some professional courses to know more		No	None
Nodes\\Technical knowledge is not important	Knowledge—technical knowledge is not important	No	None

Hierarchical Name	Nickname	Aggregate	User Assigned Color
Nodes\\The journey actually involve the environment, whether are they sensitive to how important proj mgr is, if they are not sensitive to it, the professional identity may not be there. I think that's the conclusion. The awareness, need to achieve this credibili		No	None
Nodes\\Training and education		No	None
Nodes\\Training helps PM avoid mistakes	Education—helps avoid mistakes	No	None
Nodes\\Training required before performing the role	Education—important prior to PM work	No	None
Nodes\\Value of Certification		No	None
Nodes\\Working autonomously as a PM	Autonomous	No	None
Nodes\\Yes, PM should be a professional	Professional—yes, PM should be	No	None