Rethinking researching project management Understanding the reality of project management careers

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Abstract

Purpose – The purpose of this paper is to identify issues in the long-term development of project workers, their career paths, their contribution to organizational success and their need for equity of opportunity. The long-term development of project workers, their career paths and their contribution to organizational success is explored.

Design/methodology/approach – A qualitative research design using semi-structured interviews was employed to gain an understanding of social and human issues related to careers in project management (PM). By researching the lived experiences and feelings of those pursuing a career in PM the aim was to gain insight into the career journeys and experiences of practicing project managers. Findings – Those who choose to pursue a career in PM have the personal characteristics and sufficiently high levels of self-efficacy to deal effectively with the uncertainty inherent in the nature of projects and of project-based employment.

Research limitations/implications – Participants were drawn from current project practitioners. As a result, the views of those who have worked on projects and chosen not to continue their career in the area have not been gathered.

Practical implications – Predictions are that there will be a continuing demand for project managers with the capabilities required to deliver successful projects. The challenge for organizations is to create an environment that will encourage greater numbers of people to embrace the uncertainty of project. The findings reported provide insight into how organizations might attract, develop and retain the project expertise they require for success.

Originality/value - This research provides further understanding into the lived experience of project managers, with a focus on those who have unexpectedly found themselves pursuing a career in PM. **Keywords** Uncertainty, Opportunity, New organizational structures, Project management careers, Temporary organizations

Paper type Research paper

Introduction

Ten years ago, in a UK government funded initiative, researchers and practitioners identified the need for extension of project management (PM) research in five directions across three areas of practice within PM (Winter *et al.*, 2006): the what; the how and the who! It is their third area, the refocussing on the who of projects that is the driver for our research. In this area Winter et al. (2006) argue the need for a better understanding Demerald Group Public Limited of practitioners in projects in the modern era calling for a theory in practice, moving

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International Journal of Managing Projects in Busines Vol. 9 No. 4, 2016 pp. 903-930 1753-8378 DOI 10.1108/IJMPB-04-2016-0033 IIMPB from that of a trained technician to a reflective practitioner. We investigate the experiences of the modern project worker with a view to exploring their long-term development; their career choices, and their contributions to organizational success to understand the new directions of the reflective project practitioner. Using social cognitive career theory (SCCT) (Lent et al., 1994) we explore the reality of careers in PM today by addressing two research questions:

- RQ1. How are project managers in Australia today experiencing their careers in PM?
- RQ2. And, how are organizations addressing the issues of support and career development in PM?

New ways of working and of organizing work to extract new outcomes have become a priority, and with these changes comes the need to understand and support the changing needs of the project worker. Yet, ad hoc management of the careers of project practitioners will not furnish flexible and agile organizations with the mastery, connectivity and experience they require (Suikki et al., 2006; Bredin, 2008). Our findings suggest that many have become project managers by accident (Paton et al., 2010), rather than design, but that the majority enjoy project work and wish to remain in PM. The temporary nature of roles within PM, whether serial roles within the one organization or within a range of organizations can hamper individual professional development. Interviews exploring the career journeys of 75 people in project-based roles suggest that those who choose to enter and continue in project roles see both challenges and opportunities in the uncertainties they encounter. As work becomes increasingly project based (Lindgren and Packendorff, 2006) this has implications for the choice and development of those in project work, and for the human resource (HR) practices associated with their management. Additionally, although an increasing number of females are pursuing careers in PM they are still "locked out" of some career opportunities within or linked to the profession.

Projectification of work

New and flexible works structures within our organizations are increasingly supported by the use of project teams. Packendorff (1995) and Kreiner (1992) identified that it is PM that will provide a way for organizations to release the creative forces within themselves to enhance participation rather than merely to control. Processes vital for organizational success are now carried out across industries using PM which has "become a common form of work organization in all sectors of the economy" (Lindgren and Packendorff, 2006, p. 841). As far back as 1983, Mintzberg (in Söderlund, 2004) recognized the move to a project-intensive approach to work, particularly in emergent industries since Second World War. Changes in the way organizations are structured and work is organized within them have led to what has been termed "projectification" (Midler, 1995). More recently, PM literature shows that it is at the core of understanding the modern organization (Söderlund, 2004, p. 656); one that now deals with greater complexity of process and politics through new authority systems, different organizational structures (Whitley, 2006) and new levels of cooperation between organizations and individuals.

PM is often referred to as the accidental profession (Darrell et al., 2010; Hodgson et al., 2011; Paton et al., 2010). Traditionally, people would find themselves carrying out project-based work having undertaken a degree or training in established disciplines

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such as engineering (Paton *et al.*, 2010). Today, many carrying out their work in projects did not expect to be doing so when they entered the industry or organization. New public sector management practices have resulted in projectification within that sector (Connell, 2006; Diefenbach, 2009; Godenhjelm *et al.*, 2015), non-government organizations and aid organizations (Golini *et al.*, 2015; Ika *et al.*, 2010; Ika and Hodgson, 2014). Team members have been chosen according to skills and knowledge as part of the reorganization to ensure that work is completed on a project basis, perhaps reflecting "a contemporary style of policy work" (Connell, 2006, p. 842), or a new way of working within the public sector that, when appropriately organized, can support degendering efforts. However, Darrell *et al.* (2010, p. 56) found that some "accidental project managers" in the Western Australian public sector, despite their "technical or managerial expertise [...] lacked the required competencies to deliver a project" revealing a need for developmental opportunities to address this discrepancy and support career progression.

With economic activity increasingly performed in temporary organizations, projects have become the natural way of working, leading to the creation of project-intensive economies (Ekstedt *et al.*, 1999). This combination of growth in project-driven sectors and of project organizing across industries and sectors has led to concept of a project-based economy (Crawford *et al.*, 2013).

Project-driven organizational structures and careers

For permanent organizations carrying out day-to-day business there remains an expectation of stability. By contrast, projects, as temporary organizations, are expected to be less stable and more flexible and able to embrace uncertainty (Whitley, 2006). Projects by their very nature are fundamentally uncertain (Atkinson et al., 2006) and because they are expected to be finite they give rise to career uncertainty. Temporary, or discontinuous, work roles inherently present challenges in mapping out a career path and in accessing the development required to progress a career (Connell and Burgess, 2006), although varying project roles may, of themselves, provide opportunities for capability development to support future roles (Bredin and Söderlund, 2013). Whitley (2006) acknowledges Hobday's (2000) claim that knowledge and capabilities are built through the completion of major projects, adding to the organization's and the individual's knowledge and capability, but states that this is not always so. The Rethinking Project Management report (2004-2006) identified that practitioner development should incorporate learning how to handle both "complexity and uncertainty in projects and programmes" (Walker et al., 2008, p. 171). Temporary assignments may hamper obtaining such practitioner development.

Project teams, existing solely for the purpose of accomplishing a particular set of outputs and outcomes, are by their nature temporary regardless of whether the people who make up the team are employees of the permanent organization, employees of a supplier organization or self-employed contractors hired specifically for the duration of the project or program (Turner and Müller, 2003). This has implications for careers in project roles. In the permanent organization career progression is largely signified by position in a hierarchy, by job titles and pay scales and upward movement to increasingly senior roles (Hölzle, 2010). There is usually an expectation of similarity of work at increasing levels of complexity and authority and an associated expectation of continuity of employment. For those in project roles, even when substantively employed by a permanent organization and assigned to a project, there is expectation of discontinuity and uncertainty in terms of future assignments. Progression in

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projects, as temporary organizations, is signified not only by project-related job titles that may indicate increasing levels of responsibility (e.g. project manager, project director, program manager) but by the type and nature of project assignments.

Traditional career theory views a career from the perspective of the previously prevailing form of permanent organization. From this perspective, a career unfolds within the hierarchy of roles in an organization through which those entering progress by moving from one related job to another in a sequence decided by the organization's structure (McDonald *et al.*, 2005). They assume stability and an associated level of certainty that enables stages of career to be predicted as if secure jobs still dominated within traditional organizational structures (Savickas *et al.*, 2009). These approaches dominated in the past because organizational structures supported them (Sullivan, 1999).

The flattening of organizational structures; increased use of teams as a result of the quality movement and projectification, have introduced uncertainty and led to new and different career types. By the end of the twentieth century, economic and technological change as a result of globalization had led to new models of career including protean and boundaryless career models (Briscoe *et al.*, 2006) indicating that greater uncertainty in the form of shorter employment spans, contract work and changes in career direction were being acknowledged. The use of the word "protean" to describe an approach to career indicates flexibility and adaptability (Inkson, 2006). Those exhibiting this approach to career are said to be driven by their internal values that guide their career actions and choices and to be self-directed in managing their careers (Segers *et al.*, 2008). Careers have been described as "boundaryless" to indicate that limits or restrictions no longer exist (Inkson, 2006) although this also implies a higher level of uncertainty. Those pursuing a boundaryless career embrace uncertainty through their willingness to move within and between organizations, and change their geographic location, in order to achieve their career goals (Segers *et al.*, 2008).

Analyzing careers through the constructivist lens, Bassot (2012, p. 34) stated that "Constructivism as a paradigm posits that learning is an active process, where the learner builds his or her knowledge in an on-going way." New and challenging project roles provide an individual with an opportunity to build their career profile, but choosing to respond to such an opportunity requires initiative and a willingness to embrace uncertainty. Reflecting this inherent uncertainty, Bloch (2005) used nonlinear dynamics, chaos and complexity theories in an effort to develop a theory of career development for today's workplace. The theory of career development that Bloch attempted to develop could explain how careers unfold today; one that reflects the nature of the workplace, and the extent to which individuals and organizations adapt to new and different ways of conducting their activities.

Careers in PM

Project managers' careers may not resemble those described in the general careers literature. Project managers may move from one project to another within a single organization (McDonald *et al.*, 2005). This can lead to reporting relationships becoming clouded. Line management, project managers and the HR function need to work together cooperatively to ensure both technical and interpersonal skills of project team staff support project success (Huemann, 2010; Söderlund and Bredin, 2006), but this is not always the case. Staff may perceive that they are reporting to two bosses: their line manager and their temporary project leader (Yousaf *et al.*, 2011). Over time, this may lead to project practitioners not having clear reporting lines and responsibility for identification of and support for career development may be equally unclear

(Connell and Burgess, 2006). As a result, career development and planning may either not occur or be spasmodic, because the project manager often works across areas of the organization and reports to a range of supervisors over time. Development of career paths for project managers, or all those working on projects, is therefore problematic (Madter *et al.*, 2012), as career models in PM have not yet been developed (Bredin and Söderlund, 2013; Hölzle, 2010).

The discontinuous nature of project work impacts on career development, planning, and thus career progression because roles are temporary and project managers may choose, or feel the need, to pursue a career of contracting (Peel and Inkson, 2011). Contracting is now common for professionals following the introduction of new ways of working (Barley and Kunda, 2006; McKeown, 2005). New terms have been created for these developing approaches to careers. One such term is "portfolio career" where "individuals contract their skills and knowledge [...] creating a 'portfolio' of work activity" (Fenwick, 2006, p. 66). The term is commonly used to refer to usually well-educated, young, self-employed and, most often, male employees, or contractors, who operate as free agents, regularly changing their jobs. These portfolio career professionals are keen to find a range of short-term projects in which they can work (McDowell and Christopherson, 2009). Film and television work has been described as project based (Sydow, 2009). Similarly, McDowell and Christopherson (2009) observed that the growth in portfolio careers was often related to the creative industries, with it increasing also in the finance sector. A project manager with experience and demonstrated expertise in a particular area may in fact experience the opposite effect to that often attributed to precarious employment. Job security may be a low concern when the skills the individual has to offer are in high demand. People who negotiate contracts under these circumstances are said to form part of the "gold-collar" labor market (Holland *et al.*, 2002). They develop a portfolio of experiences, expertise and a network of contacts that support gaining of future contracts.

So project managers today may belong to the new and growing group of professionals who pursue their career through serial contracts, building expertise and networks to ensure future employment. This will, though, require the individual to plan their own career; it will require of them initiative, flexibility and self-confidence. For organizations, ensuring the number and quality of project managers is available when required has to be counterbalanced with the desire for greater flexibility.

Temporary, or contract roles

From a career development perspective, Amundson (2006, p. 4) cited an increasing "reliance on temporary or contract positions," people needing to consider self-employment as a career option, greater diversity, and the emphasis on interpersonal skills in today's team-based workplace as some of the issues impacting on careers as a result of today's chaotic work environment. Such elements introduce uncertainty while opening doors to opportunity.

In 2012, IBM planned to reduce their 20,000 workforce in Germany by 8,000 jobs (Australian School of Business, 2012). In an effort to increase flexibility, IBM was then to employ on a project-by-project basis the skills, knowledge and expertise required for projects. Those choosing to participate could become IBM certified contractors, according to their area of expertise and those people referred to as within the "talent cloud" would be able to book into training programs to improve their chances of obtaining future contracts.

Contracting may present both advantages and disadvantages (Fenwick, 2006) as the individual's employment now fits the description of "precarious" employment

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(Kalleberg, 2009; McKeown, 2005). Not all organizations retain a list of potential contractors in the way IBM planned to, and thus support to ensure skills are maintained is not often provided. Career progression will require careful planning for continuing knowledge and skills development because along with income insecurity, contract workers may be marginalized and even professional managerial-level contract workers may find development opportunities difficult to access (Hoque and Kirkpatrick, 2003).

DeFillippi and Arthur (1998) questioned how project-based organizations could build their core competencies when they "hire" human capital. Project staff are commonly employed to deliver IT projects, and MacCormack stated (Australian School of Business, 2012) that protection of intellectual property could become an issue. This is because members of an organization's workforce contracted to complete IT projects may also be engaged on competitors projects, and this could lead to conflicts of interest. Doctoral research conducted on IT PM in Hong Kong found that whereas research in other locations had found that organizations did not invest in capability development for project staff, Hong Kong organizations saw it as important to retain "a pool of stable contingent IT workers" (Ng *et al.*, 2014, p. 150), at times converting high performers to permanent staff. IT organizations in Hong Kong invested in learning programs for project staff as part of a contingent employment strategy.

Contract employment has increased in recent years, whether as a result of outsourcing or in the form of direct employment with the organization for a specified period of time. This has been noted in Australia (Buchler *et al.*, 2009; Burgess *et al.*, 2005; Campbell, 2004), in the USA (Barley and Kunda, 2006), Canada (Fenwick, 2008; Legault and Chasserio, 2003; Legault and Chasserio, 2012) and New Zealand (Peel and Inkson, 2011). Barley and Kunda (2006, p. 45) found that new forms of employment were challenging "the prevailing theories and entrenched practices of employment"; in particular, the increased use of contracting that they describe as "A new form of professional practice."

Such time-delimited work has implications for career development and progression (Connell and Burgess, 2006), leading Fuller and Stecy-Hilderbrandt (2014) to identify the need to specifically explore the career pathways of mobile, temporary or contract workers. The need for resilience to work within this new environment has been recognized now for some time (Waterman et al., 1994). For many, this discontinuous work, or regular re-negotiation of employment contracts presents a challenge that had not, at the commencement of their career, been expected (Paton et al., 2010). Indeed, it could be argued that those of the personality type that chose original career directions that commonly provided clear career paths with continuing employment and few, if any, changes of employer would consider contract work as insecure employment, and regular negotiation of contracts could be stressful for them. The new skill "contracting," involving comprehensive negotiation of conditions and establishing a profile, has to be learned to survive within boundaryless employment conditions (Fenwick, 2008). Gender differences may exist in negotiation style and success, and in the related ability to "self promote" in order to obtain new contract roles (Rudman, 1998; Marcus, 2014). Fenwick (2008, p. 14) states: "some women do not negotiate contacts aggressively, as the autonomous, competitive lone 'agent,' self-interestedly seeking the best conditions and job."

Lent *et al.* (2010) see Holland's original theory of interest or personality type and career choice as being complemented by, and as complementing, studies into self-efficacy and career progression, and thus not competing with the SCCT developed by Bandura (1986) and Lent *et al.* (2002). The two theories can be combined to better

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understand career choices and career progression. Those with personality types, according to Holland's RIASEC (realistic, investigative, artistic, social, enterprising, and conventional occupational orientations) model, that tend to seek security, may be more reserved and perhaps inflexible (e.g. realistic and conventional types), they may be ill-prepared to take advantage of some of the benefits that may be available from this form of employment because they lack self-efficacy, whereas others, such as the more self-confident enterprising type (Dessler *et al.*, 2007) may view this positively, and take advantage of the opportunities it provides.

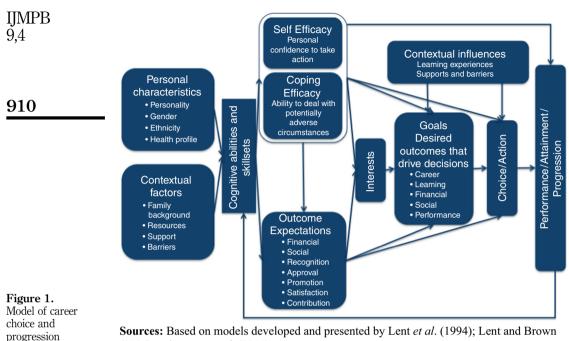
Inevitably, a workforce that might be described as employing "itinerant experts" and which is thus made up of "social pioneers" who are partaking in "a way of life and a culture of work that challenges the prevailing theories and entrenched practices of employment" (Barley and Kunda, 2006, p. 45) runs the risk of being one that lacks the depth of coordinated development opportunities and work experiences that will deepen project managers' knowledge and ability to become a reflective practitioner over time. This is likely to be especially so while HR practices remain linked to organizational structures of the past (Bredin and Söderlund, 2011a; Huemann et al., 2007). Former employment practices meant that employees joined and, where both parties saw benefits to a continuing relationship, those employees were supported to achieve their career objectives. Over the last 20 years a growing body of work has developed that questions issues around employment insecurity and commitment, knowledge retention and overall building of a profession (Campbell, 2004, 2010; Connell and Burgess, 2006; De Cuvper and De Witte, 2006; Kalleberg, 2009; Styhre, 2011). This is especially so when the HR systems within organizations have not been adapted to the ways in which professionals, in particular the growing PM professionals (Huemann et al., 2007), are accommodated for the benefit of both organizations and individuals from what might be described as a contingent workforce.

SCCT

The literature has revealed that project work involves temporary roles, often leading to contracting with associated job and income insecurity. This creates a need for project workers to take a more proactive role in their career planning and development. SCCT provides a useful framework for understanding how those choosing to work in project roles may be more likely to see opportunity than risk in the inherent uncertainty of projects. SCCT helps to explain how people form interests, make career choices and achieve relative degrees of career success. Based on Bandura's (1986) social cognitive theory, SCCT focusses on cognitive variables such as self-efficacy, outcome expectations and goals and their interaction with other personal (e.g. gender, ethnicity) and contextual factors (e.g. education, learning experiences, financial and social) that may present barriers or provide support in shaping career choices and progression. Such interactions are complex as opportunities, resources, barriers and affordances are subject to individual differences in interpretation and response (Astin, 1984; Vondracek et al., 1986). Since its articulation by Lent et al. (1994), SCCT has been widely used as a theoretical framework for research and understanding of career choice. Although it has been further developed, the key variables remain largely the same. Figure 1 indicates the theoretical relationship of these variables and their contribution to work satisfaction.

Cognitive abilities and skills, personal characteristics and a range of contextual factors, such as family background and resources, give rise to interests that influence educational and career choices. Learning experiences, through education, work and life, moderate interests and choices.

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Sources: Based on models developed and presented by Lent et al. (1994); Lent and Brown (2006) and Brown et al. (2011)

Self-efficacy is a person's confidence in their ability to successfully undertake work tasks and respond to challenges. Coping efficacy is the ability to deal with potentially adverse circumstances and barriers to performance achievement. As Lent et al. (1994, p. 106) suggest, "supports, opportunities and barriers - like beauty - lie at least partly in the eve of the beholder." Different people may view potential obstacles to performance, such as uncertainty, "alternatively as an insurmountable barrier, a minor obstacle, a characterbuilding opportunity, or even a personal contest or challenge" (Lent et al., 2000). Self-efficacy has been found to be a predictor of academic and career choice and success and both relevant skills and a strong sense of self-efficacy are considered necessary for competent performance of complex tasks (Lent et al., 1994). Aitken (2011) found that project managers have a stronger belief in their own actions resulting in positive outcomes as evidenced by their general level of self-efficacy relative to general populations. While self-efficacy is concerned with personal confidence to respond and take action, outcome expectations relate to potential consequences of decision and action. Anticipated outcomes may be financial, social including identity and recognition, approval or promotion, self-satisfaction, or the desire to make a societal contribution.

Goals are desired outcomes that drive and direct behavior. Such goals may include career direction and progression, work opportunities, financial or social rewards, or they may be desired levels of workplace performance. They may therefore be the same or similar to expected outcomes, but are qualitatively different in that they are a fundamental aspect of personal agency. Contextual factors are those aspects of the person and their environment in their formative years and throughout their work life, generally in the form of supports or barriers, which influence their choices in terms of interests, goals, and actions (Lent et al., 1994). Characteristics of the person relevant to career choice and progression include aspects of their personality, ethnicity, gender and health profile. These characteristics interact with other contextual factors such as parental, partner or teacher support or discouragement, family history including potential career role models, financial status and aspects of the external environment such as organizational context and economic conditions particularly those affecting work opportunities. Such influences will tend to have positive (supportive) or negative (constraining) effects that will be perceived and reacted to by different people either as barriers or as challenges and opportunities. Certain aspects of context such as encouragement, role models, mentoring and performance feedback directly affect self-efficacy and outcome expectations and, in turn, goal direction (Lent *et al.*, 1994)

SCCT highlights the differences in perception of individuals faced by career choices. Those with higher levels of self-efficacy are more likely to seek and respond to challenge and opportunity and those with higher levels of coping efficacy are more likely not only to be able to cope effectively with uncertainty but to actively seek it as presenting "a character-building opportunity, or even a personal context or challenge" (Lent *et al.*, 2000). Uncertainty can be considered a contextual factor, which is highly prevalent in project-based work.

Summary

New organizational structures and new ways of working have led to an increased use of project teams to deliver products and services across an increasing range of industries, sectors and organizations. Project practitioners increasingly come from a diverse range of professions and backgrounds, and are often working in a series of temporary roles within an organization (McDonald, et al., 2005), or temporary contract roles across a range of organizations (Fenwick, 2006). This can make career progression problematic; careers no longer follow a traditional course and career paths for project managers remain unclear (Bredin and Söderlund, 2013; Hölzle, 2010). Those whose work roles are based within project teams, may find access to career planning and development within these new organizational structures difficult, due to at times clouded reporting relationships (Lloyd-Walker et al., 2015). Additional pressures arise from the often project-linked contract and temporary nature of project roles. Support for career planning and progression may not always be available. High levels of self-efficacy are increasingly demanded of individuals to succeed in the new work environment in determining their own directions, development and opportunities. Organizations whose continued success depends on forming project teams with high-quality project practitioners should be thinking about their project employees differently but there is little evidence that they are doing so (Crawford et al., 2013). We asked the questions:

- RQ1. How are project managers in Australia today experiencing their careers in PM?
- RQ2. And how are organizations addressing the issues of support and career development in PM?

We propose that we will find high levels of individual determination in the direction of PM careers in Australia driven by individual self-efficacy; goal-driven decision making and a valuing of a context of uncertainty and complexity. We also propose that PM organizations have limited engagement in supporting or developing the careers of their PM employees.

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IIMPB Research design

To address our research questions we sought to gain an insight into the career journeys and experiences of practicing project managers. The rethinking PM writers have encouraged research into the actuality of the project worker. For this reason, a qualitative research design was adopted; one that would enable us to explore the career in PM today. Our qualitative research design, used semi-structured interviews, because our aim was to understand social or human issues, by researching the lived experiences and feelings of those pursuing a career in PM (Creswell, 1994; Strauss and Corbin, 1998).

In total, 75 interviews were conducted across three industry sector groups: engineering/construction, information technology/business and the public sector. The study consisted of in-depth interviews with those in project roles. Such roles included but were not limited to construction managers, project and program managers, and other project team members. A conscious attempt was made to engage interviewees at various stages in their career journeys. The average age of those interviewed was 42, the youngest, 24 years and the oldest over 65 years.

Face-to-face interviews were conducted at a location determined by the interviewees or by telephone. The semi-structured interview format was developed through an extensive literature search, and each interview lasted approximately 60 minutes. Interviews were recorded and transcribed verbatim. Participation was voluntary. Responses were treated as anonymous and results confidential. A snowball approach to sampling was used. Drawing on Lent, Brown and Hackett's (Lent *et al.*, 1994; Lent and Brown, 2006; Brown *et al.*, 2011) model of social cognitive and contextual influences on career choice behavior, data were analyzed and coded using the qualitative analysis software, Atlas.ti (Friese, 2012).

We asked all participants about issues that related directly their career preparation and progression through questions that sought to gather their experiences in relation to:

- (1) Career journeys: the participants' original qualifications and career journey since entering the workplace; including whether specific PM qualifications had been obtained, or have since; expectations; outcomes; goals; confidence.
- (2) Level of support: the support offered within their organization for professional, career-supporting development, including mentoring and the their self-support of careers in PM. Although traditionally viewed as possessing the base qualification for entry into a PM career (Gaddis, 1959), engineers have expressed a need for support in transitioning from a technical specialist role to that of project manager (Hodgson *et al.*, 2011). Entering PM from non-traditional backgrounds requires support and guidance in transitioning into PM (Paton *et al.*, 2010), especially as clear career paths in PM are not well developed (Bredin and Söderlund, 2013; Hölzle, 2010), while the temporary nature of project work further compounds the difficulty of obtaining the professional development required to support career transition and success (Connell and Burgess, 2006).
- (3) Employment type: the participants' current employment type and its uncertainty: temporary; continuing; contract; ongoing full and part-time, etc.

Findings and discussion

We commence by providing a breakdown of the participant group according to industry and gender (Table I). We then analyze the rich data provided by the interviews to explore

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the lived experience of today's PM practitioners. Due to the qualitative nature of the study, findings will be presented, and discussion will immediately follow each set of findings.

Overwhelmingly the majority of the 75 participants indicated a desire to continue to pursue a career in PM.

Career entry

The participant group included people whose original career choice did not lead them to expect to be pursuing a career in PM, or to be required to negotiate a series of contracts. Many fit the description of a precariously employed professional (Kalleberg, 2009), one who has to carefully plan for their continuing knowledge and skills development as they pursue a "portfolio career," contracting their skills and knowledge to a range of organizations (Fenwick, 2006) as they become part of the new form of professional practice (Barley and Kunda, 2006). All had experienced role changes as they participated in new and different projects, and an increasing number were finding contracting a temporary, if not permanent, career path. Codes are used to describe the participants throughout the discussions that follow. The abbreviations used are explained below, in the order they will appear after any quote:

- (1) Acc accidental; IT technology related; Trad traditional PM background;
- (2) M (male) or F (female); and
- (3) Industry sector, as shown within Table I Eng/Con, IT/Bus or PS.

The 75 participants include people from differing backgrounds. There are three identifiable groups within the participants. In total, 31 participants pursued original studies and made initial career choices that indicate an acceptance of temporary roles linked to the life of a project, at times involving changes in employer. Their original qualifications or work roles are likely to have been in engineering, civil engineering, architecture or construction (or building) management. SCCT (Lent *et al.*, 1994) would tell us that this group of participants would be likely to find the changes in project roles within an organization, or across a range of organizations, a welcome challenge, and that they would use the opportunities that short-term project placements or contract work provide to an advantage in building their career profile and to support advancement. One engineer, when asked if he had specific PM qualifications, stated:

No $[\dots]$ but $[\dots]$ the last couple of years of my Bachelor of Engineering was all based on projects and project based work (Trad-M-IT/Bus).

Another responded, when asked how he had become a project manager:

I qualified as a civil engineer [...] entered the construction industry [...] (Trad-M-Eng/Con).

During their studies most of this "traditional" group of participants had been exposed to the reality that they would be working in project teams, and even that their jobs may end on completion of a project; that continuing employment may not always be available.

	Engineering/construction (Eng/Con)	IT/business (IT/bus)	Public sector (PS)	Total	%	Table I.
Male	20	21	0	41	70	Research
Female	11	8	15	34	30	participants by
Total	31	29	15	75	100	industry and gender

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> [...] for a number of reasons, primarily personal, [...] I switched from being an employee to being self-employed [...] I then had a greater critical mass of contacts so I was able to for personal reasons step away from being an employee (IT-IT/Bus).

For some in this group it is the challenge of delivering a technology supported solution to a business problem and the satisfaction the outcome provides that compensates to some extent for loss of income security.

There is a third group of participants who could be termed "accidental" project managers; those now on an unexpected career path (Darrell et al., 2010; Paton et al., 2010). Some of these participants, because of changes for instance in the way work is done in the public sector, found their roles redefined and PM methodology introduced for delivery of all work outcomes. The move to short term, project-related roles and possible job insecurity, according to SCCT (Lent et al., 1994) may be in conflict with their original career choice and work role expectations; they may lack the self-efficacy to succeed within this new way of working. Several have, though, especially when provided with PM training, come to enjoy working on projects and are starting to adapt to short-term placements, or the possibility of having to negotiate a new contract:

It's more of a career river than a career plan. I started off in humanitarian programs, moved through policy areas, state government and then had a senior management role in CommOrg for four years which was part program management but also program quality areas of work (Acc-F-PS).

This third group contains 37 participants, 26 of whom are female, demonstrating an increasing participation by women in PM. The group includes four with no formal post-secondary qualifications, but overall the group had a high level of education. Four females in this group have completed a doctorate and two are enrolled in a PhD; a further 11 had masters degrees, six of whom were female. Of the 41 male participants across the three groups, 1 male held a doctorate and another was enrolled in doctoral studies a further eight males had completed master degrees. Initial qualifications within this group include accounting, teaching, veterinary science, arts, nursing, geology, politics, science and psychology.

To summarize, of the 75 participants, 7 were categorized as having begun their career in IT but not necessarily with the expectation of discontinuous project work that may require them to choose contracting as a career (Peel and Inkson, 2011). In total, 37 participants held qualifications or had work experience that did not include the development of PM knowledge and skills, indicating that more than 50 percent of the participants came from non-traditional PM backgrounds.

Career journeys

Those unexpectedly finding themselves working in PM had to find ways of fitting into the new work environment, however, over time the experience has often proved positive:

I came from a very regulatory process driven career so I found project managing very confusing because it was like what is the right thing to do, what is the step by step process [...] I had to seek out assistance because I got thrown into project management and there was nobody that knew any more than I did [...] it's been really positive, it's been a really good experience (Acc-F-PS).

Project practitioners may find themselves within the new form of professional practice, often linked to projectification, that of contracting (Barley and Kunda, 2006; Bredin and Söderlund, 2011b; Peel and Inkson, 2011). Training and development may not be available to contract workers in the same way it is for continuing employees. Additionally, negotiating professional development opportunities or support for training may require well-developed negotiation skills, supported by high levels of self-efficacy:

I am on a strict tenure and I do not expect to tap into any training during that time, I expect more and more you move into the contracting realm the more and more you are responsible for your own training requirements, needs and learnings, and that's tough for a lot of people because they don't stop to take the time to do that learning, it's time and it's expense that isn't necessarily seen. So it is a tough realm to work, but here I don't expect to get any training. The only training I would expect to get is to interact with people that I can pick up knowledge from (Acc-F-PS).

You're employed for a specific role for a time frame; you don't get professional development allowances etc. [...] So I tend to try and take responsibility for my own professional development because I love the shorter term gigs that you have to dive into, explode with energy, do a thousand things and know it's got a finite date but it comes with some drawbacks and one of those is long term career investment [...] I think part of it is I'm my own worst enemy [...] I get so involved in the projects and managing the projects, making sure everyone else is skilled up, that sometimes I don't do it [...] and I think [...] on my CV it is a great disadvantage (Acc-F-PS).

"Accidental" project managers demonstrate recognition of a problem; professional development is not commonly offered to contract staff, but continued learning and development is required to progress their career in PM. The need to adopt a protean and boundaryless career approach (Inkson, 2006; Briscoe and Hall, 2006; Segers *et al.*, 2008) was apparent to them. One participant who had funded her own masters and doctoral studies, though viewing them as assisting her in maintaining back-to-back contracts with various employers over 13 years, had to plan out her own professional development. Those who have more recently become project managers accept that career progression is a personal responsibility requiring a proactive approach :

My career in terms of variety, senior roles, professional development has been under my own guidance (IT-F-IT/Bus).

I think it's up to you to tap into it yourself. You have to use your own initiative, definitely if you wanted PM qualifications there are opportunities in there. We do receive training [...] (Acc-F-IT/Bus).

And as far as my career and competence development, the only person responsible for me developing further, or not doing that, is myself, I would think (Acc-M-IT/Bus).

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IJMPB 9,4 Along with maintaining a good relationship with those she is contracting with to ensure future roles, another participant had taken on responsibility for her career progression and has found obtaining new contracts relatively easy as a result:

[...] pretty much me doing it for myself, I tend to have really strong relationships with my managers. All of them would have me back to work for them again [...] (Acc-F-IT/Bus).

916 As this participant also suggests, it may require that the new contractor develop skills in networking to become noticed and sought after to participate in projects for a range of organizations mainly within the one industry. Contextual factors, as identified within SCCT, may have contributed to this participant's ability to adopt a confident, flexible approach to career. During her formative years she had studied overseas and, belonging to Generation X, she with her contemporaries had witnessed changing work structures and roles that had led to people changing jobs more frequently. Another participant, from a traditional PM background also demonstrated how their previous work life, or contextual factors, continued to influence on their current views, in this instance choosing not to contract:

I have always basically been a full time employee. I suppose I came out of the military and that's my view on it, it's a little bit to do with loyalty [...] (Trad-M-Eng/Con).

But networks do remain important. One experienced IT contractor stated:

[...] in IT project management, you hire out of your network (C-M-IT/Bus).

This suggests that the new professional PM contractor will require the self-efficacy (Lent *et al.*, 2000) and basic skills in negotiating new contracts, often supported by the intelligence they gather on current conditions from networking within the PM community and their related industry professional networks. Some may call on an agency that links contractors with organizations requiring specific expertise:

[...] as you're nearing the end of completion you discuss renewals with your client and potentially the agency and then you work from there [...] (IT-F-IT/Bus).

The agency will take on the responsibility for negotiating the terms of the contract, including remuneration. This participant demonstrated coping efficacy that supported her successful move from employee to contractor. She had independently sought skills development, eventually completing a PM-related doctorate.

Observing the new environment, and desiring a change in career direction, another participant who commenced her career in nursing but now worked on projects within government developing strategy and policy related to the health industry, combined use of agencies with contacts developed through networking:

[...] before the contract was up[...] I started looking again and going back to the couple of agents that I'd used in the past and a couple of contacts with other networks (Acc-F-PS).

Another example of coping efficacy, this participant also demonstrated the confidence required to ensure her desired outcome expectation; that of a new career direction was achieved. Coping efficacy, a specific aspect of self-efficacy, is a factor in determining how people will interpret and respond to potential obstacles and barriers. Those with high self and coping efficacy are more likely to see barriers as opportunities and challenges. It is a matter of perception and attitude. For instance, one female project manager said that she had not encountered anything in her career journey that she would consider as a barrier and if she did, she would apply her negotiation skills (IT-F-IT/Bus).

Level of support

There was little evidence of extensive organizational support for careers or career development in PM. The PM professional may need to learn about and gain career development opportunities, by joining and participating in appropriate networks, and gaining the knowledge required to negotiate contracts for continued employment. By using an agency this contractor felt that they were being assured of receiving a competitive rate of pay and conditions:

[...] it's a commercial arrangement. The client will [...] list the job with an agency and the agency tells you the rate (IT-F-IT/Bus).

They had found a service that could assist them to survive in the new work environment. Being strategic about the roles you get involved in and the experience and learning gained from them can support career progression. Strategically managing your own career means ensuring that a range of skills and a depth of knowledge are gained to support future employment. Gaining career opportunities within organizations can also involve building networks and relationships:

I think I've become quite senior in [Department] and I've built a network and I've built relationships with industry and I've built a pretty strong project management focus (Acc-F-Eng/Con).

This participant acknowledged the strong support she had received support from two senior members of staff, though neither was an appointed mentor. They provided support and advice required to negotiate the career path she desired. This interviewee stated that she sought promotion and self-satisfaction in her career:

I sort of want it all. I want both. I want to progress in my career, I want to take on more responsibility, and I want the recognition for that but I want to do it on my own terms I guess. I still want to be able to leverage the niche that I've built and I can have both, I know I can [...].

Her outcome expectations demonstrate self-efficacy, driven by outcome expectancy.

A project practitioner now employed as a contractor may identify a need for help; support in negotiating contract terms, and the need to develop a supportive network to ensure future roles (Fenwick, 2012). Differences in success in negotiating terms may, in some instances, be influenced by gender because it calls on self-promotion skills less likely to be demonstrated by females (Rudman, 1998; Marcus, 2014). One participant, when asked about negotiating contract terms, responded that she had asked for a higher rate of pay but had not been successful, and commented:

I was doing the challenging, interesting projects. I actually, [...] I actually think it is males are often paid more because they've got the guts to do that sort of thing (Acc-F-PS).

Having come from a non-traditional PM background, lack of self-efficacy may have been a factor. However, another participant from an IT background, who had gained serial contracts through an agency, did not feel this pressure; she was confident that the negotiations performed by an agency on her behalf were protecting her interests.

Although expressing a commitment to a career in PM, some expressed feelings of insecurity at moving to contract project work, but were able to demonstrate why doing so would, at least at the moment, constitute a risk they were not willing to take:

I have always been a permanent full time employee. Because of job security and I never thought I had the skills as a contractor and now that I would say I do have the skills to be a contractor I have family commitments and a very large mortgage and to risk going into

Project management careers 918 she was doing: contract (Acc-F-PS). Another participant found contracting interesting, but: embark on family, with creating a family [...] (Acc-F-PS). participant said: looking for other work (Acc-F-PS). enjoying the work: security (IT-M-IT/Bus). or find themselves in, project-based roles. Self-support mechanisms of the project manager The results provide support for previous research indicating that those in project-based roles are likely show to high levels of self-efficacy when compared to a general population (Aitken, 2011). There is ample evidence that project personnel enjoy the variety and challenge and have confidence in their ability to successfully tackle complex tasks. There is also evidence that personality played a part in the career choices, success and progression of the respondents. Those who indicated an intention to continue to work in PM commonly mentioned a desire for new challenges, variety and learning: I do enjoy having new challenges and it does provide that because generally the projects, it's only a couple of years and then you're on to something else and I enjoy [...] I've worked on such a variety of different things, just the learning, that keeps me going because I enjoy learning (Acc-F-PS).

IIMPB contracting it's just too high of a risk at this point in time. Maybe in a couple of years' time depending on how things turn out I might go into contracting but at this point in time it's just 9.4 too high of a risk (Acc-M-IT/Bus).

> This participant's self-efficacy had increased as a result of successful completion of projects over several years, but commitments still led them to choose secure, continuing employment over contract work.

> On an unexpected career path working on projects, another participant sought the security of continuing employment, though happy with the organization and the work

I felt that I could see a future with CommOrg. I was looking for opportunities that I would become permanent, like a permanent role as well. Yeah, I really enjoyed working for them. It was a great organization and, yeah, I was certainly searching for those whilst I was on the

I actually found it was I felt kind of more insecure, because you just didn't know. You've got responsibilities, particularly if you've got a house and a mortgage and that type of thing, that to be able to pull your weight and my husband is self-employed, so sometimes it's great and sometimes it's not great [...] with studying and building a house and probably about to

Researchers in the health and medical fields have found a link between delayed childbearing and precarious, or casual, work (Steele *et al.*, 2014). Another female

I found out last week that they're ending the contract early, [...] so after four years, I'm now

In her late 30s, she expressed concern that the insecurity of contract work was interfering with her desire to have children and she feared that it may now not ever be possible. The lack of security does lead some to question remaining in PM, despite

Not sure I will remain, though, as all the work now is in short term contracts. I need more

Uncertainty is one of the potentially adverse circumstances that face those who choose,

It was a challenge. Knowing I could do more than I was doing was hard. I'm not going to diminish that but the trade-off was we made a lifestyle decision to come to Australia. I don't regret that decision [...] I think it did put me back a bit but not substantially (Acc-F-Eng/Con).

Now a manager of major projects, this interviewee demonstrated that self-efficacy had supported her desire for increased challenge, and career progression, when she said that within one to two years of arriving in Australia her career was back on track, and that after ten years:

I have been given more and more responsibility and more complex projects and I've gone from managing an individual project to now managing a suite of projects under the redevelopment of (Park) [...] there are lots of individual projects underneath that and \$1 billion worth of work there whereas previously I was managing \$140 million projects. So I've progressed in terms of scope in terms of number of people I've managed (Acc-F-Eng/Con).

Her self-belief had enabled her to progress her career despite moving to another country, to take on more responsibility, and gain recognition for her achievements. The interviewee's comments highlight the link between personality, self-efficacy and career progression. Those with low levels of self-efficacy may not possess the same ability to persist if faced with challenges that could be viewed as setbacks (Bandura, 1997), uncertainty or "potentially adverse circumstances", such as a mid career move to a new country, as shown in Figure 1.

A participant who could be classified an "accidental" project manager, and who was succeeding in progressing along their unexpected career path, clearly demonstrated confidence in his personal skills or a level of self-efficacy that supported his progress:

In all the roles I've had, I've had a really good success in ensuring that I get the right mixture of project management, of commercial and all those other sorts of things as well (Acc-M-Eng/Con).

For another participant, the desire for career progression involves greater challenge:

That's I think why I'm starting to think about specialising in certain areas so that I can pick and choose the projects so that I get the reward that I'm looking for [...] I'd look for project management not only to be able to deliver that challenging project but also to grow and develop people along the way and give back wherever I can (Acc-F-PS).

A belief in the ability to do something new and different can assist in developing a broad range of skills and knowledge to support future employment. One participant, from a traditional PM background, realized this. He had gained considerable experience in bridge construction so he applied for a position that would broaden his skill and knowledge base to support career progression:

I was looking now to get some bigger companies then, bigger project experience. So I interviewed with [ConsCo][...] and got a job there on the [...] tunnel project in [...]. That's a three and a half kilometre tunnel [...] (Trad-M-Eng/Con).

This participant demonstrated a high level of self-belief when he stated:

I've wanted to get as high as I can as quickly as I could. And I guess kind of that's why I enjoyed that first company so much, is you did get as much as you could. And that's why when I got to that point where I couldn't get any higher, that's why that was the end of the road for me (Trad-M-Eng/Con).

Project management careers IJMPB 9,4 This level of self-efficacy is similar to that expressed by a PM with an engineering background in terms of willingness to take on difficult tasks, opening the door to opportunity:

If you're not scared of failing you'll take the jobs on. A lot of people shy away from difficulties. That interest in doing something unusual led to lots of other things (Trad-M-IT/Bus).

Women also demonstrate self-efficacy but often in a more reserved and reflective manner than men, supporting evidence that women are less inclined to self-promotion at work (Rudman, 1998; Marcus, 2014):

I have a combination of big picture thinking and ability and sort of draw those things out, but also an eye for detail in terms of implementing this kind of change (Acc-F-Eng/Con).

Having commenced his career with a trade, this interviewee's ability to understand how he needed to respond in order to progress his career led to him being promoted to site manager and then project manager level:

[...] I think in this industry you have got to be sort of self-motivated if you want to get anywhere. [The firm] are [...] of the opinion that you throw people in at the deep end and if you swim to the top you keep moving forward whereas if you don't you kind of get parked to a certain extent (Trad-M-Eng/Con).

One interviewee who had chosen engineering as their career, or had followed the traditional path PM, demonstrated the personality attributes that may have originally helped to attract him engineering:

If you're really hungry for it, you will get it. I haven't had any barriers in my way. I've been very lucky. I think it's about the individual. If you want it, you will get it. I just keep looking for it, saying that I'd like a mentor. And eventually it comes to you. I want to be a senior project manager, and I will get there (Trad-M-Eng/Con).

Others from less traditional areas who have succeeded in contracting in PM take a similar approach:

[...] freelancing is something I very much prefer; it means you can start again. I get bored easily. And it has given me time to travel, for instance. You can leave the industry for a while, then return quite easily, which you can't do as a line manager [...] as a contractor, around a year or so typically, though they get longer as you get more experience. But those firms weren't obliged to give me any training or career advice. So my career has been entirely self-managed from start to finish. No company has ever taken an interest in my career. They're interested in the project I'm doing [...] I have to be totally proactive, decide what industry I want to be in, all of that. I've[...]been self-educated. I did my MBA, am enrolled in a PhD, decide what certifications to do (IT-M-IT/Bus).

Expressing a high level of personal agency, an interviewee from the 'traditional' group stated that:

As far as barriers are concerned [...] the only barrier to anything you want to do is yourself so you have to just get out there and do it (Trad-M-Eng/Con).

Continuing this theme, a female project manager in the IT/Business sector said:

I don't believe there are any specific barriers if you are prepared to show initiative (Acc-F-IT/Bus).

Yet another indicated some feelings of insecurity related to contract work, but also acknowledged the advantages that might be gained:

Obviously the market conditions are not very good at the moment, but if you want to get work quickly, contracting is normally a very good way of finding work. Consulting I found was a really good way of improving my knowledge exponentially very quickly, they say that one year in consulting is the equivalent to three years in a normal client situation. The full time was for job security etc. (IT-M-IT/Bus).

For some, barriers and adversity are acknowledged but re-interpreted as opportunities:

I was being bullied, and then you see the culture starts at the top so you might as well move on, which was the best thing I ever did anyway[...]. In this [new] group, [...] they're so on the front foot and embrace moving forward and don't care if you work remotely, Just as long as you get the job done. They're great (IT-M-IT/Bus).

I didn't have the same ethical policies as this person, so I decided it was the best thing to just go and seek something else. And it turned out to be the best thing I had ever done. I had my previous bosses [...] and I had offers from all of those guys to come and work for them (Acc-M-Eng/Con).

Even significant career challenges can be re-interpreted as a steppingstone to opportunity and further progression. Impacted by environmental uncertainty of the global financial crisis, one male interviewee in the engineering sector had his project canceled and found himself stranded in a foreign country with his family with "thirty days to get out":

I just pushed and pushed and pushed, and I had friends there who knew my skills, so I just utilised the friendships. That was the jump to [new company] which was excellent for my career (Acc-M-Eng/Con).

He perceived this not as a setback but as a door opening for him.

Employment type

Uncertainty of employment is reflecting a broader environment but especially in PM (Amundson, 2006, p. 4). This is a contextual factor influencing career choice and progression (refer Figure 1). For this sample of people involved in project-based work there is diversity of opinion about the advantages and disadvantages, benefits and dis-benefits of inherently temporary forms of employment relative to other employment forms that imply permanency. Such diversity of opinion reflects different perceptions and attitudes to risk primarily associated with personal circumstances. Permanent employment is generally considered more secure and less risky, although one interviewee challenged the reality of this:

Before the year 2000 a [permanent/career position] was generally perceived as a good thing [...] but since then the nature of work has changed and employers don't treat employees as humans they treat you like numbers. And if your number doesn't add up they will get rid of you very quickly. I don't think that loyalty plays a big part in going forward anymore. I think people will display professionalism but I don't think they will display loyalty because that's not rewarded anymore (Acc-M-IT/Bus).

For some, the decision to pursue a temporary contract role vs permanent employment is seen as a function of risk appetite, influenced by personal circumstances at a point in time and a trade-off between security and flexibility, in some cases associated with job satisfaction:

I'm at a period in my life now where that little bit of risk and uncertainty probably isn't as risky as it once would have been, just because of personal circumstances, economic Project management careers

IJMPB 9,4	stability being more in place now, I would have been very uncomfortable doing it a long time ago [] (Trad-F-Eng/Con).
-)	Expressing a personal preference for permanent employment, a male project manager in the IT/Business sector, said that this preference:
922	[] could be due to my nature, I'm more risk averse. I can plan. At one stage I was doing a little bit of contract, the attraction was you will learn more and have a higher financial reward. Permanent you have more planning and more security. It depends on different people (IT-M-IT/Bus).
	For others who expressed a preference for permanent employment, the main reasons given were job security and family commitments although others, even those from a traditional PM background, cited disadvantages of contract work such as, You do not get access to certain things (Trad-M-Eng/Con). Supporting the view that those who choose project-based work are comfortable with uncertainty, seeing it as offering challenge and opportunity, many interviewees expressed favorable attitudes to temporary or contract-based work. Those coming from traditional PM backgrounds cited freedom and flexibility as advantages of contract-based employment:
	I guess the freedom of contracting, picking your employer, your industry, and perhaps even picking when and with whom you do training because you're self-funded, there's advantages in that (Trad-M-IT/Bus).
	I enjoyed being a contractor. I enjoyed the freedom to be pure, that I didn't have to worry about my career (Trad-M-IT/Bus).
	Generally, interviewees expressed a strong desire for challenge and greater opportunity leading to job satisfaction and cited these as advantages of working on a contractual basis:
	I think it has given me more opportunities. I work alongside a lot of contractors, and it's your own business (Trad-M-Eng/Con).
	[] contracting gives you the challenge that you require. Contracting throws you into the deep end which you can come out of shining. In the permanent positions I think you are a little bit sheltered, because the opportunities don't always keep coming. I think the development is slower. With a contractor you are like a hired gun and deliver (Trad-M-IT/Bus).
	Full time is more money, but now the job satisfaction is greater but I am on contract with less money (Acc-M-IT/Bus).
	A number of people considered that both permanent and temporary employment forms offered advantages, with consulting potentially offering the benefits of both worlds – a permanent employment base with multiple project assignments:
	There's advantages and disadvantages for each, I found advantages being my own person when I was contracting; I found advantages being part of an umbrella organization when I was with (ConsultCo) (Trad-M-IT/Bus).
	I have worked full time, contract and consulting. It really came down to opportunity[]. Consulting, I found, was a really good way of improving my knowledge exponentially very quickly, they say that one year in consulting is the equivalent to three years in a normal client situation. The full time was for job security etc. (IT-M-IT/Bus).
	I have done short and long term, permanent and contracting. They have all added to my skill set (Trad-M-Eng/Con).

Conclusion

The growth in PM as a career path has come about as a result of the projectification of work (Lindgren and Packendorff, 2006). It has brought many people who may not have expected to work as a project manager into the profession. In the move from the experienced technician to the reflective practitioner we note that respondents of this study demonstrate their personal reflection on their individual journey as practitioners in PM who seek to remain within the area of project work. Despite three different career pathways into PM the respondents acknowledged the importance of their own ability to deal with potentially adverse circumstances of project work through their personal learning; networking; and/or professional development and negotiation.

SCCT suggests that in order to succeed within PM, where uncertainty is generally high, self-efficacy and coping efficacy is likely to be required to seek out challenge, encourage a positive environment, identify appropriate opportunities and to increase confidence levels, and support (Lent et al., 2002). Findings from our research support an argument that those who choose and continue in project-based roles have the personal characteristics and sufficiently high levels of self-efficacy and coping efficacy to deal effectively with the uncertainty inherent in the nature of projects and of project-based employment. Indeed the respondents reported high levels of personal agency in their career development and a high need for challenging and complex work experiences. Those who have taken non-traditional paths into PM experience some challenges. especially those who had not formerly expected to be pursuing a career of contracting. Many of those finding themselves on an unexpected career journey within PM demonstrated higher levels of self-efficacy than their initial career choice might suggest, however, only those who have successfully moved into and remained in PM were part of our participant group. For those whose employment type has led them to contracting (Peel and Inkson, 2011), agencies now assist negotiations between organizations and those with the expertise they require. In particular participants who contracted, or worked in temporary roles, did find a need to network in order to support the gaining of further contracts in project organizations. Professional associations have commenced, or grown in supporting networking and professional development within the PM profession. For instance, membership of the Project Management Institute continues to increase having passed 400,000 members worldwide several years ago (www.PMI.org.com). They provide networking and professional development support, as well as circulating details of jobs available. The services of such organizations often combine with the personal initiatives of project participants to access networks to support continued career success.

The respondents indicated a joy in working on projects. Even those who indicated a preference for the perceived security of permanent employment sought the challenge, outcomes, variety and learning that project work provided. Those who actively seek temporary or contract engagements welcomed the freedom, flexibility and learning that they see being offered by this form of employment. There is a general acceptance that project-based careers are boundaryless (Inkson, 2006) and there is evidence that those in project-based roles take a "protean" approach to their careers, in which they see themselves as masters of their own destiny. Those whose employment type could be categorized "temporary" or "contract" did demonstrate an acceptance that they were responsible for carving out their own career opportunities and direction because they did not usually receive professional development support from the organization with whom they were contracted (Connell and Burgess, 2006). With an expected increase in project-based work and related demand for those willing and able to take on project

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roles (Bredin and Söderlund, 2013), the challenge will be to encourage greater numbers of people to embrace the uncertainty of projects and for organizations to develop the mechanisms to support them.

If new organizational structures are to be more project based, then employee development will increasingly need to take place within an environment of temporary roles and work. Ensuring that there is a sufficient pool of highly skilled project professionals is a growing necessity. Organizations will need to take an organized and strategic approach to the management of the careers of PM practitioners in order that they might become flexible and agile organizations with their project managers developing the mastery, connectivity and experience they require for the future (Söderlund and Bredin, 2006). The selection, assignment, development and retention of people in project-based roles should take into consideration the importance of self and coping efficacy as requirements for dealing with uncertainty, and the need to support variety, learning and opportunity for project roles, to develop and retain them, will involve providing opportunities for development of self and coping efficacy through supportive environments.

While female project workers identify similar characteristics of self-efficacy, coping efficacy and contextual influences including learning experiences and networking, they acknowledge that the opportunities available to them are reduced in comparison to the male experience of career journeys in projects. Indeed many of the men working in projects identify the lack of opportunities for women in projects. This lack of gender equity in career journeys and organizational support has long-term implications for project organizations. In the current environment a poor business approach to workplace gender equality means organizations lose out on ensuring the employment of best talent as the reflective practitioner rather than the project technician, further, the likelihood of accusations of unfair or unlawful discrimination increase (Workplace Gender Equality Agency, 2013).

There are some limitations to this research. The research has highlighted the characteristics and attitudes of those practitioners who are already in project-based employment and does not seek a broad research base by asking those not currently in project work or those who work in other industries. Further it does not include employers in the database. However, the limitation of this exploratory study into the career choices including the preparation and progression of the project professional offers opportunities for future work. We were concerned with the preparation and progression of the project practitioner career. More work could be done on the specific work experiences of the project practitioner through a survey of knowledge, skills and abilities of project managers to understand the work issues and choices of the project practitioner.

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Professor Lynn Crawford in 2014 was made an Honorary Fellow of the Association of Project Management (UK) and awarded the Sir Monty Finniston Award for a lifetime of achievement in project management. In 2011, she was made an Honorary Fellow of the IPMA and awarded their Research Achievement Award for the advancement of project research and the project management profession. Lynn is a Life Fellow of the Australia Institute of Project Management (AIPM). She is Professor of Project Management and Director of the Project Management Program at The University of Sydney and former Co-Vice-Chair of the Global Accreditation Center of the Project Management Institute, Visiting Professor with the International Centre for Programme Management at the Cranfield University in the UK and was previously a Professor at SKEMA Business School in France. Lynn is Adjunct Professor of Project Management at the Institute for the Study of Coherence and Emergence based in the USA.

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