



An evaluation of career opportunities for project management graduates in Sri Lanka

P. Selvarajan^{1,*}, P. Sivapragasham² and G. Bandara³

¹Department of Management and Entrepreneurship, Faculty of Business Studies, University of Vavuniya, Vavuniya, Sri Lanka

^{2,3} Department of Project Management, Faculty of Business Studies, University of Vavuniya, Vavuniya, Sri Lanka

*Corresponding Author: poongothai.selvarajan@gmail.com

Abstract

This paper presents and discusses the results of a study on the career opportunities for project management graduates from the state Universities in Sri Lanka. Currently there is only one Project management degree in Sri Lanka offered by the Vavuniya Campus of the University of Jaffna (currently the University of Vavuniya). There are two batches of 69 graduates. However, lack of knowledge among the relevant stakeholders regarding the career opportunities for these graduates in various sectors. Research objectives intended to identify the career opportunities for Project management graduates in Sri Lanka and evaluate the competencies required from them to find employment. A sample of 30 graduates in the population is considered for this research. A questionnaire with 20 Likert scale questions and the personal interviews have been constituted as the data collection instruments to collect the data. One of the qualitative methods- Phenomenology has been incorporated with the interpretive analysis. Findings showed that the existing project management graduates should possess additional skills to find appropriate employment in project management field. Therefore, undergraduates must be provided with the opportunity to follow other project management related professional courses to enhance their competencies. As internship training was very helpful to enhance the practical skills of students, it is recommended that the degree programme should be re-designed and improved to cater the career demand of project related professions in the current scenario.

Keywords: *Career opportunities, career success, job market, practical skills, project management graduates.*

1. Introduction

1.1 Background

Graduate manpower is vital to many sectors in Sri Lankan economy. To a large extent, compensation of graduates in the labor market is determined by the scarcity of their skills and by the graduates' potential productive value to employers. What determines any individual graduate's compensation is a complicated collaboration of many factors. There are many areas in which knowledge of the patterns of reward and compensation for graduates is important to an understanding of the relevant market forces for qualified manpower.

The concept of career is defined as “the evolving sequence of a person's work experience over time” (Arthur, Hall, & Lawrence, 1989, p.8). As such, it has various meanings to people, professionally as well as personally. Careers usually provide linkages between the inner world of self and the outer world of society. This study mainly focuses on the skills and knowledge competencies for project management graduates that can be learned and improved through training or practice. Parker (2002) argues that project performance is an important aspect since it is through their careers that people tend to seek meaning in their work lives as well as in their personal lives. As human beings, careers and the jobs we carry out in life, provide a meaning. Wheatley and Kellner-Rogers (1996, p. 63) put it, “As we go through life, we don't want to become less. We need places to nurture our passions, places where we can become more. Work is one of those places”.

Hence, the development of career models for project management graduates can be seen as a step in acknowledging and strengthening project management as a profession in its own rights. Following a project management career might without a doubt, be challenging since it involves high levels of mobility and a continuous deadline pressure. El-Sabaa (2001) identifies a number of important differences compared to the straight functional managerial career. For example, project managers are younger in their average number of movements from one organization to another is higher, the average number of lateral movements across projects and firms is higher and the average number of vertical movements along the hierarchy of firms and projects is higher. In Sri Lanka, there is lack of project management graduates to be accommodated in connection with different projects in various sectors. However, it is observed from the job advertisements that there is demand for that and requires several competencies. Therefore, there is a rationale for investigating the career opportunities for the graduates from the local Universities and their competencies. Based on this, the following research problem has been developed by the researchers since this is a new area of study in Sri Lanka.

1.2 Research problem

There is only one project management degree in Sri Lanka offered by the new University of Vavuniya. Currently, there are two batches of graduates which is approximately 70 people. However, there is no concrete idea about career opportunities for this field in the

An evaluation of career opportunities for project management graduates in Sri Lanka

public sector, private sector or non-governmental organizations (NGOs) and the competencies needed for the project management graduates.

1.3 Research questions

- What are the career opportunities available for project management graduates in Sri Lanka?
- What types of competencies are expected from the project management graduates for employability?

1.4 Objectives of the study

- To identify the career opportunities for project management graduates in Sri Lanka.
- To investigate the competencies required for project management graduates in the job market.

2. Literature review

2.1 Projectification of work

Unused and adaptable works structures inside the organizations are progressively supported by the use of project teams. Organizational victories are presently carried out over industries utilizing project management which has “become a common frame of work organization in all segments of the economy” (Lindgren & Packendorff, 2006, p. 841). Project management is often referred to as the accidental profession (Darrell, Baccarini, & Love, 2010; Hodgson, Paton, & Cicmil, 2011; Paton, Hodgson, & Cicmil, 2010). Traditionally, individuals would discover themselves carrying out project-based work having embraced a degree or training in setting up disciplines such as building (Paton et al., 2010). Packendorff (1995) and Kreiner (1992) distinguished that it is project management that will give away for organizations to discharge the inventive powers inside themselves to upgrade interest rather than just to control. New open segment administration hones have brought about in objectification inside that division (Connell & Burgess, 2006; Diefenbach, 2009; Godenhjelm, Lundin, & Sjöblom, 2015). Team Individuals have been chosen according to abilities and information as portion of the reorganization to guarantee that work is completed on a project basis, may be reflecting “a modern fashion of arrangement work” (Connell & Burgess, 2006, p. 842), or a better approach of working inside the open division that, when suitably organized, can bolster gendering endeavors. With economic activity progressively performed in temporary organizations, ventures have to be the natural way of working, leading to the creation of project-intensive economies (Ekstedt, Lundin, Soderholm, & Wirdenius, 1999). This combination of growth in project driven segments and of venture organizing over industries and segments has driven the concept of a project-based economy (Crawford, French, & Lloyd-Walker, 2013).

2.2 Career, career path and career model

A career is usually defined as "the evolutionary sequence of a person's work experience" (Arthur, 2014, p. 629). In fact, the term "occupation" can be subdivided into subjective occupations and objective occupations (Bredin & Söderlund, 2013). The subjective career describes the subjective feelings of the individual about the acquisition of experience, progress, professional development and satisfaction, while the objective career refers to the objective description of continuous work. Therefore, career paths can be separated from occupations, because career paths represent an objective work sequence, rather than personal subjective feelings about these jobs (Schein, 1996; Hölzle, 2010; Bredin & Söderlund, 2013).

This research focuses on objective occupations rather than subjective occupations. In addition, it focuses on the generalization and formalization of the project management career, not on how the project manager experiences his/her career in project management. This formal path is a generalized or idealized path for promotion in project management (Bredin & Söderlund, 2013) or an organizational framework for creating professional opportunities in project management (Hölzle, 2010). To be more specific, individuals experience multiple position levels as they advance along a career path. Thus, the career model is composed of the multiple levels of project management positions.

2.3 A new career path for project management

As projects are increasingly used as a form of organization, project management is seen as a profession with specific competence requirements, rather than temporary management tasks (Bredin & Söderlund, 2013). Compared with technical and management professions, project management is considered a professional role in the profession (Tremblay, Wils, & Proulx, 2002). It provides individuals with a means to move into management (McKevitt, Carbery, & Lyons, 2017) and a platform to learn new skills and demonstrate their talents (Crawford et al., 2013). According to the theory of unlimited occupations, individuals exercise more control over personal career development and are less subject to traditional restrictions, such as physical and mental mobility and occupations (Clarke, 2013; Li, 2018). Thus, to keep individuals engaged in the profession of project management, they need enough motivation, including not only higher income but also occupational identification (Rodrigues, Guest, & Budjanovcanin, 2016).

Crawford et al. (2013) pointed out the importance of the personal skills of project managers in taking advantage of the challenging roles and activities available within their organization, especially when they acquire new skills and knowledge. More generally, the project manager position is viewed more as a stepping stone to top-level positions in the organization (Parker & Skitmore, 2005). This leads to substantial losses of project management experience and knowledge for many organizations, especially given that project management competency has become an increasingly critical competitive

resource in the modern and increasingly complex business context. A career model plays a key role in an incentive system to attract, retain, and develop employees engaging in project management, as career opportunity is the factor most directly related to turnover intentions, and opportunity provides employees with the motivation to achieve and a reason to stay.

Opportunities provide employees with motivation to achieve their goals and reasons for staying (Hölzle, 2010; Ling & Loo, 2015). Bredin and Söderlund (2013) conducted empirical research on the career models of project managers and found that project management career models and project classifications exist in many firms, but they are not always explicitly integrated. The project management career model is clearly increasingly accepted in a variety of industries, but the research on it is insufficient.

The modern project management career persons had the bravery and confidence to face new challenges and uncertainties in projects (Lloyd-Walker, French, & Crawford, 2016). Besides, the demand for capable project managers would be increasing day by day in order to deliver projects in a successful manner. But, the project based organization had to face the challenge of inspiring employees to get used to project uncertainties. Apart from that, some project management career persons considered uncertainties as opportunities (Lloyd-Walker, Crawford, & French, 2018). They appreciated challenge, suppleness and diversity and were responsible for the progress of their careers. Moreover, project management career was a suitable career with high demand. A person should realize personal characteristics of project management career before making a decision to select this.

Nonetheless, Borg, Borg, Scott-Young, and Naderpajouh (2020) presented a framework and model for the purpose of adding a sequential measurement to the formation of the interrelated dynamic competencies during the early career phase of project management experts. This particular career could be sustainable in terms of time frame, social space, agency and meaning (Presti, Manuti, De Rosa, & Elia 2021). By the way, there would be positive and negative impacts for the project management career followers in the future (Walker & Lloyd-Walker, 2019). Considering the positive impact, those who perform different tasks in different projects would face more interesting events and receive more rewards. Considering the negative impact, those who perform the same task in every project would be replaced with advanced digital technology. Project managers must carefully consider this when planning their future tasks.

2.4 Project management competencies

Project management capability is the ability to perform activities in a unique way in the dynamic environment of a project that leads to expected results based on defined and accepted standards (Crawford, 1997). Project management competency has a direct or indirect impact on the success of projects (Ahadzic, Proverbs, Olomolaiye, & Ankrah, 2009; De Carvalho, Patah, & Bido, 2015; Tabassi et al., 2016). El-Sabaa (2001)

investigated the personal characteristics, traits and skills of effective project managers in Egypt. The findings indicate that there are 18 critical competencies that can be summarized in three categories: human skills, conceptual and organizational skills, and technical skills. Müller and Turner (2010) investigated the leadership competency profiles of successful project managers, including intellectual, managerial and emotional competencies. Othman and Jaafar (2013) contended that honesty, integrity, alertness, quickness, energy, toughness, decision making ability and self-confidence are attributes that project managers are expected to possess.

2.5 Skills and knowledge for project management

Many studies have been found about the characteristics, skills, and competencies of the serving project manager. In a study of IT project managers, necessary skills such as personal integrity, team development, client management, planning and control, and problem solving were found to be a requirement for success (Napier et al., 2009). The authors concluded by identifying several constructs related to the aforementioned skills category, including constructs such as leadership, team building, communication, quality focus, and managing complexity among others.

In the ranking of the most critical skills for IT project managers, Keil, Lee, and Deng (2013) found a slightly different skill set with 19 critical skills necessary for project managers. Similar to the aforementioned studies, leadership, communication, team building, and quality were important. Additional skills such as scope management and listening were seen as critical skills as well (among others). Interestingly, in follow-up interviews, leadership, verbal communication, scope management, listening, and project planning were seen as the top five skills for project managers.

In an article examining the role of project managers in health care, the authors concluded that a skilled project manager would address the scope, risks, procurement, quality and communication with the project (Hernandez, Aderton, & Eidem, 2011). Extended manager support may be tied to venture a success, and it is vital to avoid project directors from performing in a vacuum (Larson & Gobeli, 1989). The project manager must receive support from the organization and have a definition of roles. Without an organizational support structure that defines the project manager's roles and responsibilities, projects would lack functional manager support (Anantatmula, 2010). Darrell et al. (2010) examined that as one helps project managers and provides them with the requisite organizational support and this can be accomplished through a wide range of supportive mechanisms that organizations can implement. The organization can take other steps to assist project managers.

Nilsson and Ripmeester (2016) argued that moving from education to the working environment was very important to the students. All the undergraduates continuously strive in finding suitable employment after the graduation. This is a challenge for their universities too. Though higher education institutions (HEIs) provide career advisory

services for undergraduates, it is not enough to find the career. Students should realize the skills that employers are seeking in certain sectors. They should also make sure that employers comprehend cultural differences which are significant in searching for jobs. Consequently, HEIs should take actions to connect with employers and make students ready for global job market. Regarding policy development, coordinating labor market and education policies and including labor market perceptions and actors were essential.

Darchen and Tremblay (2010) focused on how science and technology undergraduates decided where to live after graduation in Canada. They observed the impact of quality of organization and career opportunities on mobility of these undergraduates. According to their results, quality of place was not much important compared to career opportunities. Quality of life in Ottawa was more powerful than in Montreal. Employees could improve their views through training classes, leader-member exchange and career mentoring (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011). This was helpful to get their support for organizational development. Highly professed career opportunity within the organization caused positive relationship between development support and job performance. Development support decreased voluntary turnover when there was highly professed career opportunity and increased it when there was modestly perceived career opportunity. The relationship between employee views of organizational support and job performance could be explained using social exchange and career motivation theory.

Crawford, Gregg, Macmillan, Vignoles, and Wyness (2016) studied how higher education supported social mobility. For this, they have utilized a life-course approach considering differences by family background based on university presence and accomplishment, career and earning after graduation. According to them, young people from poor families had less presence in the university than those who were from rich families. Among undergraduates, several persons attended the high status institutions, graduated and achieved higher degree classes. Differences in degree outcomes caused low average earnings of graduates from poor families. However, earning differentials were caused not only by the degree and the institution. Graduates from rich families always got professional jobs and saw higher growth of earning in the job market.

Bargsted (2017) recognized the weight of market value of occupation, sex and career competences over objective employability and professed opportunities for a career and satisfaction of fresh experts. According to him, market value of occupations highly affected objective employability. Self-efficacy and locus of control helped predict professed career opportunities. Predictive value of personal variables varied between male and female and between occupations with low, medium and high market values. That contributed to enhance intervention strategies to improve equality in labor opportunities and job placement.

Comunian, Faggian, and Jewell (2011) investigated trail and career patterns experienced by graduates in creative disciplinary arenas and their skill of entering creative occupation

and high salary. While some graduates face many difficulties in finding permanent jobs and entering into the creative economy. Graduates in creative fields considered permanent occupation as a norm. Creative graduates had lower salaries than other graduates but their wage gap was minimal while for others it was consistent and extreme. Graduates received opportunities in creative occupations and high salaries through geography.

Fernández-Cornejo, Escot, Del-Pozo, and Castellanos-Serrano (2016) investigated how young people accept sacrifice in career progression to have a good work-family balance. According to them, young women mostly accept and sacrifice in this regard. When the woman had high leadership aspirations and belonged to an egalitarian household, she was less likely to give up career opportunities. When she was keen to be involved in childcare and considered about future work-family conflict, she was more to give up those. Apart from that, women were tempted to give up career opportunities when they possessed traditional gender attitudes. But men never give up career opportunities when they possessed those attitudes.

3. Research method

The study focused on the scope for project management graduates in Sri Lanka. There are five project management batches in Vavuniya Campus (presently University of Vavuniya). Among those five batches, two batches have been graduated. Therefore, those 69 people are considered as the population. In this number, 30 graduates who have well performed in their degree programme have been considered as the sample for the current study. A structured questionnaire with 20 five point Likert Scale questions is designed to collect the basic information from the respondents and the personal interviews have been constituted as the ultimate instrument for the data collection. One of the qualitative methods - Phenomenology has been incorporated in this research study to derive the results and increase the validity of the research. With the permission of the participants, interviews were tape-recorded and then transcribed verbatim. Further, the findings have been elaborated through the interpretive method.

4. Findings and discussion

Initially, the online questionnaire survey has been carried out to gather basic general information and the in-depth information have been gathered through the personal interview. There are several interesting findings derived in this study through the interview. Since 30 respondents are the graduates from the Vavuniya Campus, their views have been stated collectively. The findings show that 82 percent of respondents have the opinion on choosing the project management degree to find the better career in project management. However, after the graduation it was difficult for them and the employers seek various pre-requisites to recruit graduates in project management careers.

*“I had a career plan when I selected project management course for higher education”
(25 Respondents: personal interview, 2021)*

An evaluation of career opportunities for project management graduates in Sri Lanka

Further, various organizations expected unique skills from the graduates which were not compatible to the graduates of Vavuniya Campus. However, 76 percent of the respondents view is that they are satisfied with the knowledge they gained from this course.

“I am satisfied with the knowledge I gained through the project management course”

(23 Respondents: personal interview, 2021)

Since the Vavuniya Campus was the only Project Management degree offering state owned institution in Sri Lanka, graduates were not aware of other competitive scenarios. As the project management curriculum is designed for all streams of students in the Advanced Level, most of the graduates are from Arts and Commerce Stream and they felt that they got new skills in project management. 64 percent of the respondents agreed on it.

“I could improve new project management skills through this course”

(19 Respondents: personal interview, 2021)

45 percent of graduates felt that they can get an appropriate career in project management.

“There are many opportunities for project management graduates in the employment sector”

(14 Respondents: personal interview, 2021)

However, 41 percent of them had in a panic condition whether they can get the right choice since the project management graduates seek the employment at the first time.

(12 Respondents: personal interview, 2021)

It is the main reason given by most of the graduates that they are not keen in pursuing other professional courses. 64 percent of respondents disagreed that their current employment is related with project management.

“I am currently employed in the project management field”

(19 Respondents: personal interview, 2021)

However, they believed that their skills and knowledge gained through this course will help to find the related employment. They further felt that they would have to wait for a long period of time to find those related career.

Moreover, as per the information given by 73 percent of the respondents that they are success in their current jobs which lead to the project management career are the knowledge and skills they gained through the curriculum of this degree as it has more practical oriented skills related with project management.

“Skills and knowledge gained from the project management course was helpful for me to find employment in project management”

(22 Respondents: personal interview, 2021)

Further, 35 percent of graduates among them had an opinion of whether the employers prefer the project management graduates at their organizations.

“I don’t know that the Employers are eager to recruit project management graduates for their organizations or not”

(11 Respondents: personal interview, 2021)

Subsequently, 50 percent of the graduates had a view that the project management graduates should have the construction site experience to find the appropriate career.

“I feel that project management graduates need knowledge on construction sites to get employment in project management sector”

(15 Respondents: personal interview, 2021)

63 percent of graduates felt that the professional qualification is also essential for them.

“I feel that the project management graduates need to have other professional qualifications to get employment in the project management sector”

(18 Respondents: personal interview, 2021)

During the programme of study, they have been given internship training in the relevant sector. 82 percent of the respondents strongly agreed that the internship training contributed immensely for their career success. Graduates experienced that the organizations expect their staff to possess the skills of self- confidence, risk taking, work from home (especially in the COVID-19 pandemic situation), time management, positive thinking, good communication and presentation skills, innovation and creativity and a visionary leadership at every level. This is learning for the graduates during their internship.

“Experience from internship training is very useful for my current career by improving the necessary skills”

(25 Respondents: personal interview, 2021)

They also felt that the course should be further improved in order to get placements in various sectors. Currently, only 13 percent of graduates agreed that their employment are in connection with construction sites since the curriculum is not fully designed to provide the knowledge to the students who seek employment in construction sites as well. This factor should be considered by relevant stakeholders in future.

“My current project management career is in construction projects”

(4 Respondents: personal interview, 2021)

91 percent of the respondents had the opinion that they prefer their career especially in project management field and they recommend the course for the potential undergraduates as well, further revision is needed in the curriculum.

“I expect to continue my career in the project management sector and I recommend project management course for new students who are supposed to enter into higher education and further revision in the curriculum is needed accordingly”

(27 Respondents: personal interview, 2021)

50 percent of the graduates viewed that the other universities should consider the potential demand for the project management career and commence the similar courses in their undergraduate degree programmes.

“I strongly suggest that the project management course must be started at other universities due to its high demand”

(15 Respondents: personal interview, 2021)

The findings from the current study support the findings of the past literature in certain extent. Project management career platform is to learn new skills and demonstrate their talents (Crawford et al., 2013).

Leadership competency identified by Müller and Turner (2010) explore the skills category, including constructs such as leadership, team building and communication investigated by Keil et al. (2013).

However, the current study identified the skills of self- confidence, risk taking, work from home, time management, positive thinking, good communication and presentation skills, innovation and creativity and a visionary leadership at every level needed for the employees to be employed in the project management organizations.

5. Conclusion and recommendations

In conclusion, the results of this research have provided some insights to the curriculum designers from various universities in Sri Lanka and the particular aforementioned university. The curriculum of project management degree programme at the Vavuniya Campus is not quite enough to find employment in project management since there are numerous employment opportunities on project management in the job market. Therefore, undergraduates must be educated towards the capacity of pursuing other project management related professional courses to enhance their practical skills and competencies in this field. Hence, they will be able to work on any type of project in any situation with confidence. In the current COVID-19 pandemic situation, many projects have been ceased and interrupted due to lack of personnel involved in a project and the scarcity of resources. However, organizations are in a position to work in this new-normal situation. As such, organizations expect that their staff to possess the skills of self-

confidence, risk taking, work from home, time management, positive thinking, good communication and presentation skills, innovation and creativity and a visionary leadership at every level. Usually project related jobs are successful if the employees should possess these skills. Therefore, the curriculum of project management degree should be further improved with new modules and practical sessions in every semester of last two years to facilitate the graduates to seek employment in project management without any difficulty. As internship training is very helpful to enhance the practical skills of students, internship placement should be carefully assessed and the university should find the appropriate places for internship. This would help the students to get the right employment after their graduation. As this research has been limited to the project management graduates of Vavuniya Campus, this has not considered about project management graduates of other non-state degree awarding institutions. This is the reason for the lacuna in the literature of Sri Lankan context. Future research can be extended to accommodate the graduates from the non-state degree awarding institutions as well. Further, it is also recommended that the other state Universities can also consider in commencing project related degree programmes to accommodate the local graduates in any type of projects in Sri Lanka.

References

- Ahadzie, D. K., Proverbs, D. G., Olomolaiye, P. O., & Ankrah, N. A. (2009). *Competencies required by project managers for housing construction in Ghana: Implications for CPD Agenda*. Engineering, Construction and Architectural Management.
- Anantatmula, V. S. (2010). Project manager leadership role in improving project performance. *Engineering Management Journal*, 22(1), 13-22.
- Arthur, M. B. (2014). The boundaryless career at 20: where do we stand, and where can we go? *Career Development International*, 19(6), 627-640.
- Arthur, M. B., Hall, D. T., & Lawrence, B. S. (Eds.). (1989). *Handbook of career theory*. Cambridge University Press.
- Bargsted, M. (2017). Impact of personal competencies and market value of type of occupation over objective employability and perceived career opportunities of young professionals. *Revista de Psicología Del Trabajo y de las Organizaciones*, 33(2), 115-123.
- Borg, J., Borg, N., Scott-Young, C. M., & Naderpajouh, N. (2020). The work readiness-career resilience linkage: implications for project talent management. *International Journal of Managing Projects in Business*, 51(2), 165-180.
- Bredin, K., & Söderlund, J. (2013). Project managers and career models: An exploratory comparative study. *International Journal of Project Management*, 31(6), 889-902.

- Clarke, M. (2013). The organizational career: Not dead but in need of redefinition. *The International Journal of Human Resource Management*, 24(4), 684-703.
- Comunian, R., Faggian, A., & Jewell, S. (2011). Winning and losing in the creative industries: an analysis of creative graduates' career opportunities across creative disciplines. *Cultural Trends*, 20(3-4), 291-308.
- Connell, J., & Burgess, J. (2006). The influence of precarious employment on career development: the current situation in Australia. *Education+ Training*.
- Crawford, C., Gregg, P., Macmillan, L., Vignoles, A., & Wyness, G. (2016). Higher education, career opportunities, and intergenerational inequality. *Oxford Review of Economic Policy*, 32(4), 553-575.
- Crawford, L. (1997). A global approach to project management competence. In *Proceedings of the 1997 AIPM National conference, Gold Coast* (pp. 220-228).
- Crawford, L., French, E., & Lloyd-Walker, B. (2013). From outpost to outback: project career paths in Australia. *International Journal of Project Management*, 31(8), 1175-1187.
- Darchen, S., & Tremblay, D. G. (2010). What attracts and retains knowledge workers/students: the quality of place or career opportunities? the cases of Montreal and Ottawa. *Cities*, 27(4), 225-233.
- Darrell, V., Baccarini, D., & Love, P. E. (2010). Demystifying the folklore of the accidental project manager in the public sector. *Project Management Journal*, 41(5), 56-63.
- De Carvalho, M. M., Patah, L. A., & Bido, D.S. (2015). Project management and its effects on project success: Cross-country and cross-industry comparisons. *International Journal of Project Management*, 33(7), 1509-1522.
- Diefenbach, T. (2009). New public management in public sector organizations: the dark sides of managerialistic 'enlightenment'. *Public Administration*, 87(4), 892-909.
- Ekstedt, E., Lundin, R. A., Soderholm, A., & Wirdenius, H. (2003). *Neo-industrial organising: renewal by action and knowledge formation in a project-intensive economy*. Routledge.
- El-Sabaa, S. (2001). The skills and career path of an effective project manager. *International Journal of Project Management*, 19(1), 1-7.
- Fernández-Cornejo, J. A., Escot, L., Del-Pozo, E., & Castellanos-Serrano, C. (2016). Do fathers who took childbirth leave become more involved in their children's care? the case of Spain. *Journal of Comparative Family Studies*, 47(2), 169-191.

- Godenhjelm, S., Lundin, R. A., & Sjöblom, S. (2015). Projectification in the public sector—the case of the European Union, *International Journal of Managing Projects in Business*, 8(2), 324-348.
- Hernandez, J. S., Aderton, J., Eidem, L. (2011). The role of project managers who assist physician leaders at Mayo Clinic. *Physician Executive*, 37(4), 62-65.
- Hodgson, D., Paton, S., & Cicmil, S. (2011). Great expectations and hard times: The paradoxical experience of the engineer as project manager. *International Journal of Project Management*, 29(4), 374-382.
- Hölzle, K. (2010). Designing and implementing a career path for project managers. *International Journal of Project Management*, 28(8), 779-786.
- Keil, M., Lee, H. K., & Deng, T. (2013). Understanding the most critical skills for managing IT projects: a Delphi study of IT project managers. *Information & Management*, 50(7), 398-414.
- Kraimer, M. L., Seibert, S. E., Wayne, S. J., Liden, R. C., & Bravo, J. (2011). Antecedents and outcomes of organizational support for development: the critical role of career opportunities. *Journal of Applied Psychology*, 96(3), 485-500.
- Kreiner, K. (1992). The post modern epoch of organization theory. *International Studies of Management & Organization*, 22(2), 37-52.
- Larson, E. W., & Gobeli, D. H. (1989). Significance of project management structure on development success. *IEEE transactions on Engineering Management*, 36(2), 119-125.
- Li, Y. (2018). Linking protean career orientation to well-being: the role of psychological capital. *Career Development International*, 23(2), 178-196.
- Lindgren, M., & Packendorff, J. (2006). What's new in new forms of organizing? on the construction of gender in project-based work. *Journal of Management Studies*, 43(4), 841-866.
- Ling, F. Y. Y., & Loo, C. M. (2015). Characteristics of jobs and jobholders that affect job satisfaction and work performance of project managers. *Journal of Management in Engineering*, 31(3), retrieved from [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000247](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000247).
- Lloyd-Walker, B., Crawford, L., & French, E. (2018). Uncertainty as opportunity: the challenge of project based careers. *International Journal of Managing Projects in Business*, 11(4), retrieved from <https://doi.org/10.1108/IJMPB-04-2017-0044>.
- Lloyd-Walker, B., French, E., & Crawford, L. (2016). Rethinking researching project management: understanding the reality of project management careers. *International Journal of Managing Projects in Business*, 9(4), 903-930.

- McKevitt, D., Carbery, R., & Lyons, A. (2017). A profession but not a career? work identity and career satisfaction in project management. *International Journal of Project Management*, 35(8), 1673-1682.
- Müller, R., & Turner, R. (2010). Leadership competency profiles of successful Project Managers. *International Journal of Project Management*, 28(5), 437-448.
- Napier, N. P., Keil, M., & Tan, F. B. (2009). IT project managers' construction of successful project management practice: a repertory grid investigation. *Information Systems Journal*, 19(3), 255-282.
- Nilsson, P. A., & Ripmeester, N. (2016). International student expectations: career opportunities and employability. *Journal of International Students*, 6(2), 614-631.
- Othman, N. L., & Jaafar, M. (2013). Personal competency of selected women construction project managers in Malaysia. *Journal of Engineering, Design and Technology*, 11(3), retrieved from <https://doi.org/10.1108/JEDT-02-2012-0005>.
- Packendorff, J. (1995). Inquiring into the temporary organization: new directions for project management research. *Scandinavian Journal of Management*, 11(4), 319-333.
- Parker, P. (2002). Working with the intelligent career model. *Journal of Employment Counseling*, 39(2), 83-96.
- Parker, S. K., & Skitmore, M. (2005). Project management turnover: causes and effects on project performance. *International Journal of Project Management*, 23(3), 205-214.
- Paton, S., Hodgson, D., & Cicmil, S. (2010). Who am I and what am I doing here? becoming and being a project manager. *Journal of Management Development*, 29(2), 157-166.
- Presti, A. L., Manuti, A., De Rosa, A., & Elia, A. (2021). Developing a sustainable career through discourse: a qualitative study on a group of Italian project managers. *International Journal of Managing Projects in Business*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJMPB-12-2020-0376>
- Richardson, T. M., Earnhardt, M. P., & Marion, J. W. (2015). Is project management still an accidental profession? a qualitative study of career trajectory. *SAGE Open*, 5(1), 1-10.
- Rodrigues, R., Guest, D., & Budjanovcanin, A. (2016). Bounded or boundaryless? an empirical investigation of career boundaries and boundary crossing. *Work, Employment and Society*, 30(4), 669-686.

- Schein, E. H. (1996). Career anchors revisited: implications for career development in the 21st century. *Academy of Management Perspectives*, 10(4), 80-88.
- Tabassi, A. A., Roufehaei, K. M., Ramli, M., Bakar, A. H. A., Ismail, R., & Pakir, A. H. K. (2016). Leadership competences of sustainable construction project managers. *Journal of Cleaner Production*, 124, 339-349.
- Tremblay, M., Wils, T., & Proulx, C. (2002). Determinants of career path preferences among Canadian engineers. *Journal of Engineering and Technology Management*, 19(1), 1-23.
- Walker, D., & Lloyd-Walker, B. (2019). The future of the management of projects in the 2030s. *International Journal of Managing Projects in Business*, 12(2), 242-266.
- Watson, R. (2015). Quantitative research. *Nursing Standard (2014+)*, 29(31), 44-48.
- Wheatley, M. J., & Kellner-Rogers, M. (1996). Self-organization: the irresistible future of organizing. *Strategy & Leadership*, 24(4), 18-24.