



The Role of Certification on Project Management: Perspective of PMP Certified Project Managers

Proje Yönetiminde Sertifikasyonun Rolü: PMP Sertifikalı Proje Yöneticilerinin Yaklaşımı

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Abstract

The purpose of this study is to investigate the role of certification in a project management environment from the perspective of Project Management Profession (PMP) certified project managers. To do so, a semi-structured questionnaire survey was created through a focus group discussion technique and applied to 30 PMP-certified project managers. The data obtained were analyzed via the SPSS 20 statistical package and results were presented in two sub-sections: (i) the demographic information of respondents and (ii) the specific perspective of project managers about PMP certification. Several organizations offer comprehensive and constantly updated certification programs to adapt to the changing needs of the project management profession. Thus, professionals can confirm their knowledge, abilities, and skills in the project management field. Moreover, certification is a key factor for the project management profession regarding up-to-date training offered, standardization of project management applications, and continuous development in project management performance. This paper aims to aid project managers to be aware of the potential benefits of PMP certification to improve project management capabilities as a source of competitive advantage.

Keywords: Certification, project management, project management institute, PMI, PMP

Öz

Bu çalışmanın amacı, proje yönetimi mesleğinde sertifikasyonun rolünü Proje Yönetimi Profesyoneli (Project Management Professional, PMP) sertifikalı proje yöneticilerinin bakış açısından araştırmaktır. Bunun için odak grup tartışma tekniği kullanılarak yarı yapılandırılmış bir anket oluşturulmuş ve 30 PMP sertifikalı proje yöneticisine uygulanmıştır. Elde edilen veriler SPSS 20 istatistik paketi aracılığıyla analiz edilmiş ve sonuçlar iki alt bölümde sunulmuştur: (i) katılımcıların demografik bilgileri ve (ii) proje yöneticilerinin PMP sertifikasyonuna özel bakış açısı. Birçok kuruluş, proje yönetimi mesleğinin değişen ihtiyaçlarına uyum sağlamak için kapsamlı ve sürekli güncellenen sertifika programları sunmaktadır. Bu sertifikalar, proje yönetimi alanındaki profesyonellerin bilgi, yetenek ve becerilerini kanıtlayabilme ve geliştirebilme imkanı sağlamaktadır. Ayrıca sertifikasyon, sunulan güncel eğitimler, proje yönetimi uygulamalarının standartlaştırılması ve proje yönetimi performansında sürekli gelişimin sağlanması açısından proje yönetimi mesleği için önemli bir araç olarak görülmektedir. Bu çalışma, PMP sertifikasyonunun bir rekabet avantajı kaynağı ve proje yönetimi yeteneklerinin geliştirilmesinde kullanılabilecek bir araç olarak, proje yöneticileri açısından potansiyel faydalarının anlaşılmasına yardımcı olmayı amaçlamaktadır.

Anahtar Kelimeler: Proje yönetimi, proje yönetimi enstitüsü, PMI, PMP, sertifikasyon

1. Introduction

Project management (PM) is to execute a project considering limited time, limited budget, and expected quality standards (Uhlir 2013). In this regard, PM is a profession since

project managers are trained to improve their management abilities (Pant and Baroudi 2008). This profession has been developing continuously since the beginning of the 1960s. Since the 1970s, the training/education philosophy evolved and the concept of lifelong learning has become more popular (De los Rios-Carmenado et al. 2011). Thus, several associations have started to conduct training and certification programs for project managers in developed countries (Soroka Potrzebna 2021).

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The significance of project managers or team members for a prospering project execution has altered dramatically in the past few years (Alam et al. 2010, Hadaya et al. 2012). Moreover, the expected technical, business, and management knowledge of project managers has transformed into a more competitive characteristic (Aslam and Bilal 2021). Therefore, vocational training or certification programs of specific associations have emerged as key factors to remain competitive in professional life (De los Rios-Carmenado et al. 2011). However, the lack of certification programs in the PM profession was a disadvantage, while the importance of certification programs has been increasing (Pinto and Winch 2016). In the 1990s, OECD adopted life-long learning education and the skills acquired in a specific area have started to be confirmed through certification programs (Pang et al. 2008).

In the field of PM, certification programs were initiated to be regarded as mediums for project managers to improve their skills and capabilities (De los Rios-Carmenado et al. 2011). Accordingly, knowledge and experience-based standards started to be required in the PM field of several industries (Crawford 2005). Several methodologies aim to formalize and standardize the PM profession such as PMBoK Guide (project management body of knowledge), PRINCE2 (projects in controlled environments), PCM (project cycle management), TenStep, IPMA (the international project management association), Agile, and SCRUM (Soroka Potrzebna 2021). Among these, PMI and PRINCE2 are the two most popular PM methodologies where the project managers' competencies are defined (Sobieraj et al. 2021). Today, most project managers are certified by these two organizations considering the need for constant definition, education, experience sharing, and certification in the PM profession (Aslam and Bilal 2021, Rastovski 2021).

The increased influence of project managers on completing projects within the expected time, quality, and budget forced companies to conduct a critical process of selecting appropriate professionals for their projects (Müller and Turner 2007). Therefore, skill-based education becomes a significant factor in ensuring employability in the PM environment (De los Rios-Carmenado et al. 2011). Among many other certifications, Project Management Professional (PMP) issued by PMI is the most popular one with more than 1.4 million certification holders (PMI 2023). In this regard, only a few researches were conducted to point out the importance and influence of PMI certification in the PM profession. However, the project managers' attitudes on

PMP were not revealed. Therefore, this study aims to reveal the effect of PMP certification on professionals' careers from the perspective of PMP-certified project managers. To accomplish the research aim, previous studies on PM certification programs were reviewed in a detailed manner. Then, a focus group discussion (FGD) was conducted to develop a questionnaire survey. Finally, participants were surveyed through a semi-structured five-point Likert-scale questionnaire survey. Consequently, the data obtained were analyzed via SPSS 20 (Statistical Package for the Social Sciences 2020) statistical package and results were presented in two sub-sections: (i) the demographic information of respondents and (ii) the specific perspective of project managers about PMP certification. This research is expected to be a notable effort for not only professionals but also researchers and students to understand the significance of certification programs, significant factors, and the importance of PMP certification for the PM profession.

In the next section of this study, the two most popular certification programs and the literature review were given as background. The research methodology is then explained. This section is followed by results and discussion. Finally, conclusions, some limitations, and future research suggestions were given.

2. Background

A proper PM methodology may ensure a successful project execution from the initial stage to completion. For this reason, project standards/frameworks are utilized to improve the PM performance of organizations. These standards/frameworks are expected to assist project managers and project teams to implement the projects successfully (Zwi-kael 2009). Table 1 presents previous studies on the effect of PM frameworks, certifications, and professionals. The literature presents an increasing interest in the significance of PM frameworks in several industries (Rastovski et al. 2023, Simonaitis et al. 2023, Lopez and Alexander 2023, Onyia et al. 2023, Robertson and Stock 2023, Pinto 2022, Soroka Potrzebna 2021, Aslam and Bilal 2021, Al-Zwainy et al. 2016, De los Rios-Carmenado et al. 2011). According to previous studies, the future trends in the PM field reveal the importance of continuous education and improvement of individuals through certification programs (Rastovski et al. 2023). PMBoK and PRINCE2 are two PM methodologies that were preferred most in the PM environment (Sobieraj et al. 2021). These frameworks aim to identify project objectives, enhance quality, improve communication, and train

Table 1. Past studies

Reference	Objective and Method	Certification	Results
Rastovski et al. (2023)	The attitude of project professionals towards competency-based certification in the field of PM was investigated through a qualitative research method.	IPMA	PM competencies can contribute to individuals' competitive advantage.
Simonaitis et al. (2023)	The PM methodologies were compared regarding repetitive construction projects through structured interviews.	n.a.	The PRINCE2 is found to be the most suitable framework.
Lopez and Alexander (2023)	Current graduate PM curricula within the United States were analyzed through a qualitative research method.	n.a.	None of them addressed the full spectrum of the subject.
Onyia et al. (2023)	Construction management skills and competencies were analyzed regarding PM methodologies through a qualitative research method.	n.a.	Quality of training and certification was found to be significant.
Robertson and Stock (2023)	The relationship between PM certification and quality was examined through a qualitative research method.	n.a.	A negative relationship was quality was found.
Pinto (2022)	Implications for current and future practice in PM were investigated through Grounded Theory.	n.a.	Economic, societal, and environmental will be faced in the PM field.
Soroka Potrzebna (2021)	The importance of certification in PM in the labor market is investigated through a qualitative research method.	PMP, AgilePM, PRINCE2	A higher importance of experience over certification was found.
Rastovski (2021)	The effect of certificates on project managers' careers was analyzed through Grounded Theory.	IPMA Level C, B, or PMP	A positive influence of certification was found on project managers' careers.
Aslam and Bilal (2021)	The impact of PM certification on strategic and operational performance was investigated through a qualitative research method.	n.a.	Certification has a direct impact on the performance of project managers.
Farashah et al. (2019)	The value of PM certification in recruiting was investigated through questionnaire surveys.	PMI, IPMA, PRINCE2, others	No direct relationship between certification and performance was found.
Karaman and Kurt (2015)	Two PM methodologies, PRINCE2 and PMBOK, were compared in the IT industry.	n.a.	PRINCE2 is preferable for small-size IT projects; whereas PMBOK is preferable for large ones.
Catanio et al. (2013)	The effects of PM certification on project scope, time, and cost management were investigated through a qualitative research method.	n.a.	No performance difference between uncertified and certified project managers was found.
De los Rios-Carmenado (2011)	The effect of PM certification on employability was investigated through interviews with professionals.	IPMA	The certification was found to be a powerful tool for improving employability.
Stevenson and Starkweather (2010)	The effect of PMP on IT PM competencies across United States industries was investigated through a qualitative research method.	PMP	PMP certification was not a highly valued criterion in evaluating new hires.
Müller and Turner (2007)	The performance of certified and non-certified project managers was compared through a qualitative research method.	n.a.	No performance or project success criteria differences were found.
Crawford (2005)	The relationship between PM standards and effective PM performance was measured through hypothesis tests.	n.a.	No significant relationship was found.

professionals regarding up-to-date management philosophy (Simonaitis et al. 2023). They have enabled project managers to verify their skills, capabilities, and knowledge to find appropriate working conditions since they have started to be utilized as a tool during the process of candidate selection (Soroka Potrzebna 2021). The PMBoK and PRINCE2 were developed based on the world standards and methodologies of PM (Kulejewski 2008). The PMBoK as the most recognizable PM framework, standardizes the organizational activities of employees and workers through relevant PM guidelines and mediums (Sobieraj et al. 2021). On the other hand, the PRINCE2 framework is more focused on the construction investment processes, planning of time schedules, and providing standards to ensure the repeatability of projects.

Considering the geographic widespread, the PMBOK framework is more popular in North America, while the PRINCE2 is more favorable in Europe, as it originated in the United Kingdom (Murray 2009). The differences between PMBoK and PRINCE2 and the comparison of these methodologies were studied in several past studies (Simonaitis et al. 2023, Sobieraj et al. 2021, Karaman and Kurt 2015, Matos and Lopes 2013, Wideman 2002). However, these studies have not reached a consensus about which certificate or framework could be the most effective PM methodology to implement for personal and organizational success. In this study, a certification system based on the PMBoK (developed by PMII) was considered since it represents more comprehensive knowledge of PM and is widely accepted as the best practice in the field of PM (Association for Project Management (APM) 2022, Munns and Bjeirmi 1996).

2.1. PMI Certifications

A project manager may improve his/her skills and so can have a higher status by attaining a PM certification program (Blomquist and Thomas 2004). Professional PM organizations have developed several standards for the PM profession such as ethics and workplace through professional certifications like PMP (Pinto 2022). Moreover, certified qualifications were identified as one of the critical success factors in improving construction management skills (Onyia et al. 2023). PMI's first PMBoK was published in 1983 and the first PMPs were certified in 1984 (Duncan 1995). In 1994, this number has increased to around 2600 (Allen 1995). In 2007, the PMI certification program was accredited by the International Standards Organization (ISO) (Iyer and Banerjee 2019). Then, in 2020, PMP was in the first position

among other certifications that take attention most in the PM field (Global Knowledge 2020). Today, the PMI (2023) serves around 2.9 million professionals located in different countries in the field of PM with nine certifications. These certifications are (i) Project Management Professional (PMP), (ii) Certified Associate in Project Management (CAPM), (iii) PMI Professional in Business Analysis (PMI-PBA), (iv) Program Management Professional (PgMP), (v) Portfolio Management Professional (PfMP), (vi) PMI Risk Management Professional (PMI-RMP), (vii) PMI Scheduling Professional (PMI-SP), (viii) PMI Project Management Ready, and (ix) Construction Professional in Built Environment Projects (PMI-CP). The most famous certificate given for project managers is PMP and there are more than 1.4 million PMP certification holders worldwide and it is followed by CAPM with more than 50 thousand professionals. PMP certification was referenced as the best highest-paying certificate in the PM environment (Skillsoft 2023; Study International 2023). Considering previous studies and future perspectives, PMP can be regarded as the most attractive certification, and therefore it's worth studying in a detailed manner.

2.2 Literature on PMI Certifications

PM certifications have been regarded as useful criteria for identifying the most suitable candidates for management positions in several industries (Soroka Potrzebna 2021). This is because certifications were assumed as mediums that present the capabilities, capacities, and skills of the candidate to be interviewed (Pohler and Willness 2014). Therefore, having a certificate may bring numerous competitive advantages for project managers. However, although numerous researches have been carried out in the field of PM, the literature on the certifications is scarce (Morris 2014). PMI certifications are considered the most widely preferred ones and this study focused on PMP since it is the most popular certificate in a PM environment. The literature on PMI certifications has mainly focused on confirmation of qualification, developing skills, and meeting job requirements. Regarding PMP certification, it is the most frequently demanded certificate in terms of requirements for project manager job offers in Poland and Germany, while it is the second most popular certificate in England (Soroka Potrzebna 2021). On one hand, recruiters and executives of Information and Communication Technologies (ICT) companies found PMP certification irrelevant to the characteristics of potential candidates they look for in Sweden (Stevenson and Starkweather 2010). On the other

hand, companies tend to hire certified project managers in Pakistan, especially in the construction and IT industry (Aslam and Bilal 2021). Even though the PMP certification provides a greater level of formalized training (Catania et al. 2013), the significance of experience in PM is still high to perform better than competitors (Lopez and Alexander 2023). This is because, despite the many advantages of PM certifications, they cannot guarantee to maximization of the performance of project managers (Ahlemann et al. 2013). However, it can be assumed that standardized PM may perform more effectively than unstandardized one (Morris et al. 2006).

Considering the impacts of certifications on project managers' careers or performance, Rastovski et al. (2023) aimed to investigate the attitude of project professionals towards competency-based certification in the field of PM through a qualitative research method. In their research, they interviewed 246 project, program, and portfolio managers who have IPMA certification in Croatia. Consequently, they concluded that PM competencies can contribute to individuals' competitive advantage. Soroka Potrzebna (2021) analyzed job offers that require certification in Poland and stated that there is a higher importance of experience over certification in the PM field. In another study, Rastovski (2021) conducted research with 35 project managers to present the effect of IPMA level C, B, or PMP on project managers' careers. He identified five major criteria that influence the careers of project managers such as (i) lack of skill and knowledge, (ii) continual professional development, (iii) better job opportunity and salary, (iv) ability to manage complex projects, and (v) legislation and the employer. Finally, he concluded that there is a positive influence of certification on project managers' careers. Similarly, Aslam and Bilal (2021) studied the impact of PM certification on project performance in Pakistan. The researchers interviewed project managers to measure project performance based on strategic performance and operational performance. They found that PM certification issued by any organization has a direct impact on the strategic or operational performance of project managers. Stevenson and Starkweather (2010) investigated the effect of PMP on IT PM competencies across United States industries through a qualitative research method and concluded that PMP certification was not a highly valued criterion in evaluating new hires. There is also another study conducted by Müller and Turner (2007) that aimed to compare the performance of certified and non-certified project managers. Although they found no performance or project success criteria difference

regarding certifications, the results revealed that certified managers perform better on high-performing projects. On the contrary, Crawford (2005) found no relationship between PM standards and effective PM performance.

The PM methodologies/certification studies were focused on the relationship between methodologies/certification and particular concepts such as (i) project performance (Simonaitis et al. 2023, Onyia et al. 2023, Robertson and Stock 2023, Aslam and Bilal 2021, Catania et al. 2013, Müller and Turner 2007, Crawford 2005) (ii) employment (Soroka Potrzebna 2021, Rastovski 2021, Farashah et al. 2019, De los Rios-Carmenado 2011, Stevenson and Starkweather 2010), (iii) personal improvement (Rastovski et al. 2023, Lopez and Alexander 2023, Pinto 2022), and (iv) comparison of methodologies (Simonaitis et al. 2023, Karaman and Kurt 2015). However, studies investigating the effect of PM certifications usually consider a generalized approach to these certifications rather than focusing on a particular one. This may cause some misunderstandings or false conclusions since several certification systems require different qualifications and training processes. For this reason, it is believed that concentrating on one particular certification will bring clearer results for both academicians and practitioners. In this manner, there is only one study that was conducted to reveal the effect of PMP on IT PM competencies across United States industries. Stevenson and Starkweather (2010) stated that PMP certification was not a highly valued criterion in evaluating new hires in the IT industry. However, there is a gap in the literature analyzing the effect of PMP certification on project managers' careers. Thus, the main purpose of this study is to fill this gap and make contributions to the PM body of knowledge by investigating the attitudes of certified project managers towards PMP certification. To this aim, an FGD-based semi-structured questionnaire survey was developed and applied to certified professionals. Moreover, factors affecting project managers to prefer PMP certification were also analyzed. Consequently, the obtained results may assist researchers in conducting further studies on PM certifications and motivate practitioners to improve their careers through PMP certification.

3. Research Methodology

In this study, the research methodology consists of two steps which are presented in the following sub-sections.

3.1. Focus Group Discussion

FGD is a discussion-based technique utilized to explore

and gather data from experts in a particular subject and has been widely utilized in research in the past years (Hasan et al. 2018, Liu et al. 2017). This method enables to harmonization of various approaches provided by participants and to exploration of diverse opinions on selected subjects (Koc and Gurgun 2022, Kunkcu et al. 2023). Moreover, this technique has advantages in means of time and cost-effectiveness for data gathering (Gold and Vassell 2015). Since an overcrowded session with too many participants may lead to undesired chaos during sessions, 5 to 10 participants were accepted as satisfactory in this technique (Nyumba et al. 2018). Therefore, 5 PMP-certified project managers were selected in FGD this study to discuss past studies, identify questions, and create the questionnaire survey utilized. To avoid misunderstandings and save time, previous studies were summarized and potential questions were identified by the researcher before the FGD meeting. During the meeting, questions selected from the literature (Soroka Potrzebna 2021, Rastovski 2021, Farashah et al. 2019, De los Rios-Carmenado 2011, Stevenson and Starkweather 2010) were discussed and adapted to PMP certification by the experts. Finally, a questionnaire including

questions related to demographic information and questions presented in Table 2 was formed.

3.2. Data collection

Based on the results of FGD, a semi-structured questionnaire survey was created to explore the personal experiences and attitudes of project managers on PMP certification. In the first part of the survey, profiles of respondents were identified. The next ten questions were assessed to receive general perceptions of participants on PMP certification. The final question was open-ended to gather respondents' opinions and thoughts. The survey was completed during March and April 2023 via e-mails sent to respondents. A total of 225 professionals with available contact information were discovered from online platforms (i.e. LinkedIn). The number of participants who responded to the survey was 30 (the response rate is 13.33%) and this number ($n \geq 30$) can be considered valid in terms of the representation of the total sample group (Daim et al. 2013, Uhlir 2013). Questions were designed in the form of a five-point Likert-type scale since the Likert scale offers a range of possible values for respondents' answers (Windapo et al. 2020). Finally, the

Table 2. Perspective of project managers on PMP certification.

Question	SA	A	PA	D	SD	Mean
PMP creates a competitive advantage against rivals for my professional career.	63.33%	33.33%	3.33%	-	-	4.60
PMP boosts the opportunity to get better jobs and higher salaries.	46.67%	20.00%	16.67%	16.67%	-	3.97
PMP increases the ability of managers to handle more complex projects.	50.00%	30.00%	20.00%	-	-	4.30
PMP improves the managing skills of professionals.	63.33%	36.67%	-	-	-	4.63
PMP increases the faith of professionals to conduct projects successfully.	46.67%	20.00%	16.67%	10.00%	6.66%	3.90
PMP increases the popularity of professionals in their companies.	13.33%	20.00%	30.00%	26.67%	10.00%	3.00
PMP improves the reputation of professionals in the business environment	30.00%	26.67%	33.33%	10.00%	-	3.77
PMP creates new opportunities to build a network between PM communities	63.34%	33.33%	3.33%	-	-	4.60
The process of having PMP is considerably challenging for professionals	26.67%	53.33%	10.00%	10.00%	-	3.97
PMP has provided more benefits for my career than I expected	46.67%	33.33%	20.00%	-	-	4.27

Notes: SA: Strongly agree; A: Agree; PA: Partially agree; D: Disagree; SD: Strongly disagree.

data gathered were evaluated through a statistical analysis of given answers via SPSS 20 and the results were discussed considering previous studies.

4. Results and Discussion

4.1. Profiles of Respondents

According to Figure 1(a), 30.00% of the respondents have a BSc degree, 50.00% have an MSc degree, and 20.00% have a PhD degree. The portion of participants who studied at the postgraduate level reveals a group of well-educated professionals who participated in this study. Therefore, the sample group can be regarded as well-informed professionals in their area of expertise. More than 1.4 million professionals have PMP certificates from all over the world and the PMI certification system has been disseminated in more than 70 countries (PMI 2023). The sample group of this study represents thirteen countries and the number of participants from Turkey leads this sample group with 20.00% (Figure 1b). Although several studies focused on the impact of PMI certification from several countries, none of them include Turkey and most of them examined single country-based data (Aslam and Bilal 2021, Soroka Potrzebna 2021, Uhilir 2013, McHugh and Hogan 2011, Alam et al. 2010). Since Rastovski (2021) did not reveal the participants' profiles, to the best of our knowledge, both developed and developing countries were represented for the first time in a sample group of a study focused on the attitudes of PMP-certified project managers.

The PM practices are popular in traditional industries, such as ICT, energy, health care, construction, and finance sectors (Richardson et al. 2015). Certified project managers are preferred especially in the construction and IT industry (Aslam and Bilal 2021). In this regard, participants' industries were listed according to the results of the third question. The majority of the participants (46.67%) work in the construction industry, while telecommunication and ICT were represented by 13.33% (Figure 1c). Moreover, health electronics, electricity, media, education, health, and human resources are other industries where participants work as PMP-certified project managers. However, Lundqvist and Marcusson (2014) stated that employer interest in PM certifications in ICT is considerably low. Therefore, representing several industries may bring more comprehensive results to implicate the impact of PMP certification. Project managers usually have a significant duration of experience in their profession and this experience can be considered as a key factor in executing projects successfully (Isik et al.

2009, Prabhakar 2005). However, they may change their industries regarding job satisfaction or working conditions. In the study, the duration of experience of respondents was examined through a scaled question. Consequently, it was found that a vast majority of respondents have more than 15 years of experience. Therefore, it can be claimed that the sample group of this study has enough experience to reveal general thoughts and opinions on the PM profession. The final question on the demographic information of respondents aimed to determine the duration of being a PMP-certified professional. Figure 1(d) reveals that 50.00% of participants have the PMP certification between 1 to 5 years, while 20.00% have 6 to 10 years, and 13.33% have 11 to 15 years. The portion of respondents who have had PMP certification for more than 15 years is 16.66%. Since the PMP certification is valid for three years, the sample group represents entry-level, intermediate-level, mid-level, or executive-level PMP-certified professionals.

4.2. Perspective of Project Managers on PMP Certification

Professional certifications and standards issued by the organizations of PM are expected to improve the PM skills of professionals. ISO 17024 prescribes certification processes to ensure that certification systems function consistently, comparably, and reliably (Uhilir 2013). These certifications represent the ability of knowledge, skills, and experience according to a defined certification schema (ISO 2003). In this regard, the associations have created required standards to assist and confirm project managers' abilities through a certificate (Soroka Potrzebna 2021). Thus, it was clear that a project manager should be competitive and to be competitive he/she should successfully and efficiently perform all of his/her functions (Uhilir 2013). PM certifications provide continuous development of professionals and improve their competitive advantage for them (De los Rios-Carmenado et al. 2011). As shown in Table 2, more than half of the participants (63.33%) strongly agree that PMP certification creates a competitive advantage in a PM environment. As far as certification represents a confirmation of personal professional competencies, obtaining a certificate from a reliable institute guarantees the qualifications and knowledge of project managers all over the world (Soroka Potrzebna 2021). Also, certified professionals can prove that their skills and knowledge meet the international standard for the PM profession (ISO 2003). Certification should not be the only criterion to determine the management capabilities and skills of professionals (Farashah et al. 2019). However, PMP

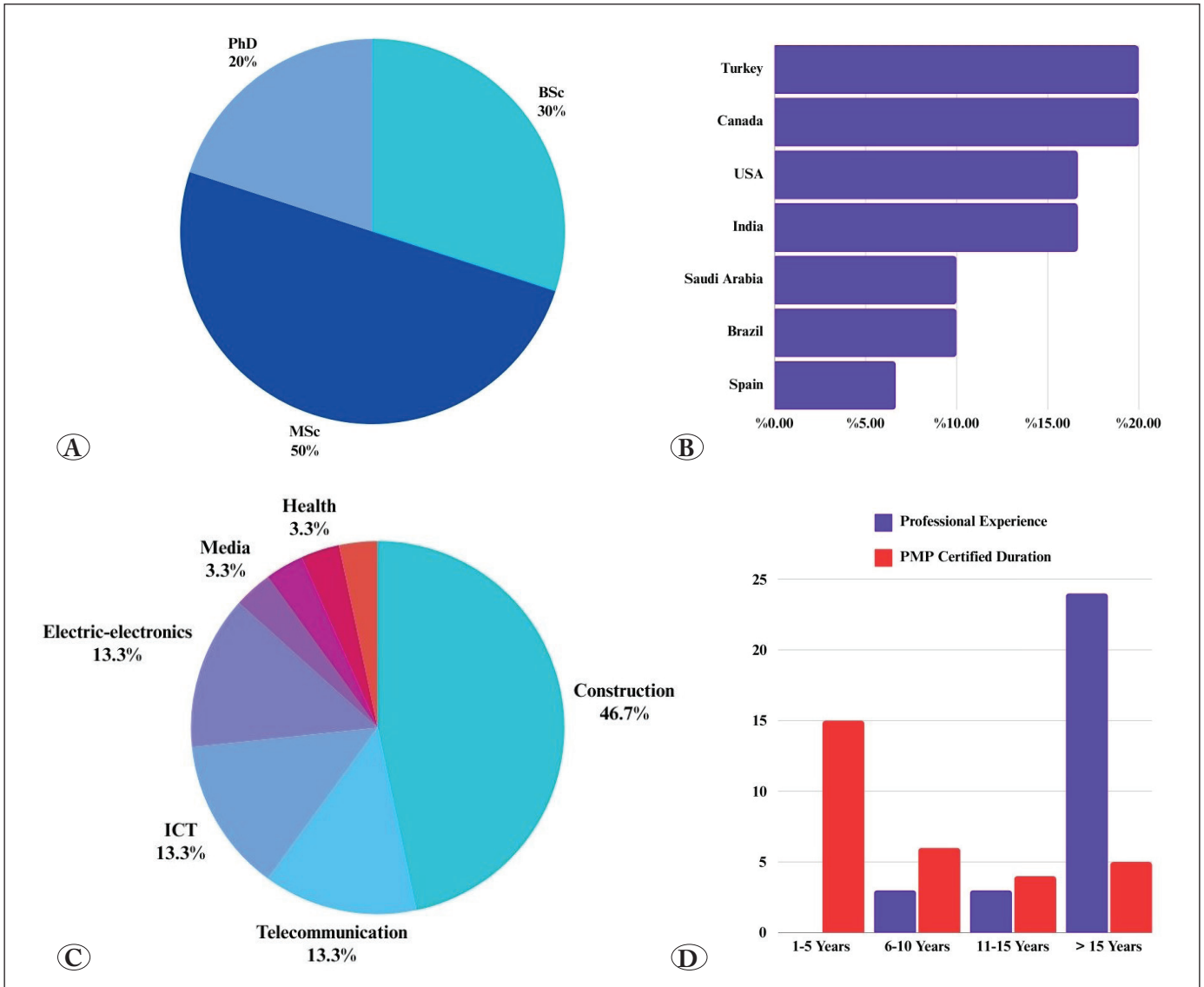


Figure 1: Respondents' profile: (A) Education level; (B) Location; (C) Industry; (D) Duration of experience and certification.

certification stimulates an increase in salary or the possibility of applying for a better-paying job. In addition, certification can be utilized as proof of meeting companies' requirements for a particular job role (De los Rios-Carmenado et al. 2011). Hence, PM certification has become widespread and practitioners respect these certifications for determining the ability and skills of the project managers (Lundqvist and Marcusson 2014). In this study, 66.67% of the respondents agree or strongly agree that PMP certification creates better job opportunities. This result is consistent with the study conducted by Soroka Potrzebna (2021). International companies and projects have a great potential to benefit from PMP certification because it clearly defines the standards of PM in the international arena (Crawford 2000). Success-

ful PM includes coordination between tasks, resources, and people, and business today is all about completing projects faster, cheaper, and better (Harvard Business School 2001). According to Rastovski et al. (2023), professionals working in the construction/architecture field strongly believe that PM certification plays a significant role in increasing PM performance. Similarly, respondents of the current study also believe that PMP certification can increase the ability of project managers to handle complex projects successfully (80.00%). The operational or strategic performance of project managers cannot always be improved by PM certification alone (Farashah et al. 2019, Catanio et al 2013). However, Rastovski et al. (2023) state that certification improves the performance of project managers and helps them

to direct projects adequately. This statement is consistent with the results of this study that shows PMP certification improves the managing skills of professionals (100.00%) and increases the faith of managers to carry out projects as planned (66.67%). A certified project manager knows project initiation, planning, execution, monitoring, and closure, as well as risk management and PM best practices (Soroka Potrzebna 2021). In this regard, certification can facilitate the recognition of project managers and increase their value on the market (Rastovski et al. 2023).

However, there is no evidence that certification guarantees a successful PM performance (Müller and Turner 2007). Thus, participants of this study were not certain about the effect of PMP certification on providing popularity or reputation in the business environment (56.67%). In addition, being educated and gaining updated knowledge are significant factors in being recognized as a professional in the PM community (Rastovski et al. 2023) and the public (De los Rios-Carmenado et al. 2011). In this regard, PMP certification may provide a network with fellow professionals to share ideas and discuss problems with other certified project managers (Aslam and Bilal 2021, Soroka Potrzebna 2021). Moreover, connecting the professional communities, standardizing codes and ethics, and providing a platform to discuss professional opinions through a certification mechanism may improve both the skills of professionals and the conditions of the profession (Farashah et al. 2019). Respondents also strongly agree (63.33%) that PMP certification creates new opportunities to build a network between PM communities. Despite the benefits of PMP certification, certified professionals believe that it is a challenging process to have this certificate (80.00%). Especially, the process of selecting the most proper kind of certificate or quantifying the exact extent of the certificate can be difficult for professionals. This is because PRINCE2 was recommended by Simonaitis et al. (2023) for repetitive construction and by Karaman and Kurt (2015) for small-size IT projects, while PMBOK is preferable for the IT projects with large and complex project teams (Karaman and Kurt 2015). Moreover, in several cases (Rastovski 2021, Soroka Potrzebna 2021, Farashah et al. 2019) no significant difference was identified between PM methodologies/frameworks. Therefore, professionals should be well prepared to select the most suitable certification for their careers and to maximize the benefit of PMP certification. The performance of PM can be accepted as successful if all project parties are satisfied with the results obtained. Moreover, none of the PM certifications can guarantee a

successful project execution but verified competencies and knowledge may contribute to a project positively. Finally, PMP-certified project managers have benefitted from this certification more than they expected (80.00%). Therefore, working with PMP-certified project managers can improve the results and maximize the benefits of projects executed.

To find out the effects of selected factors and rank them, the mean values of each question were also evaluated regarding the assigned values for given answers (SA=5, A=4, PA=3, D=2, SD=1). According to the results (Table 2), the most influential factors to motivate professionals for PMP certification are improving managing skills (4.63), creating competitive advantage (4.60), and building a network between PM communities (4.60). On the other hand, increasing the popularity of professionals in their companies (3.00) is the least significant factor in motivating professionals to prefer PMP certification.

5. Conclusion

This study invokes the significance of the PMP certification system for project managers. In the field of PM, abilities, knowledge, experience, and skills should be standardized, categorized, and kept updated. In this regard, the professional associations related to the PM profession play a key role as revealed by most of the PMP-certified professionals. PMP certification creates better job opportunities, improves management skills, and establishes new network options for project managers. Moreover, PMP-certified managers gain a reputation in the PM field since companies seek standardized and increased levels of PM profession. To conclude the study, certification in PM paves the way for continuous development in project performance by providing a well-structured training and education platform for professionals.

The limitation of this study is that it is based upon only the PMP certifications while there are other PM certifications issued by PMI or other organizations. Moreover, a larger sample group would allow us to reveal the impact of PMP certification on project managers' careers in a more detailed manner. However, the results are generally in parallel to previous studies and the study can be considered as an introduction for future studies. In future works, conducting comparative analysis based on demographic characteristics such as profession, education, and development level of the countries of participants could contribute to the PM body of knowledge.

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