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Business school students' motivations and intentions to pursue a project management career

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ABSTRACT

Project management (PM) career choice is important as millions of new projects will need skilled and motivated project managers. Therefore, the younger generation must be motivated to acquire the necessary skills to deal with project complexities and dynamics. In previous research, the factors that impact students' perceptions of their learning experiences and their readiness to PM work has been investigated without examining the factors that impact the choice of a PM career. In this study our aim is to describe the intentions and motivations of business school students to pursue a PM career. Our results demonstrate that motivations such as self-development, professional growth, status and power, and technical and human skills are significantly influential in PM career choices.

Introduction

Society has become project-oriented where several projects are performed simultaneously in companies, municipalities, schools and even in families (Gareis & Huemann, 2001). This orientation has also brought an increase in roles and positions that require project-management skills. According to the Project Management Institute (PMI, 2017), 87.7 million individuals will be needed to work in project management-related positions by 2027, and these projects will contribute $20.2 trillion to global economies' GDPs. However, this potential can only be realised if enough qualified people can be recruited for these positions; therefore, it is crucial to provide the younger generation with the necessary skills to cope with the complexity and dynamics (Turner & Huemann, 2001) of projects.

Business schools can play an important role in tackling this challenging duty by providing academic programmes that address industries' current needs and supporting their students to acquire the necessary skills to be effective project managers (Borg & Scott-Young, 2020; El-Sabaa, 2001; Fisher, 2011; Lampel, 2001). Appropriate programme designs can also trigger students' interest in PM work and inform them about possible career and professional development opportunities (King, 2004; Madter et al., 2012). Therefore, we focus on these schools as a research context to understand students' intentions and motivations towards choosing a PM career.

A career could be defined as "the evolving sequence of a person's work experience over time" (Arthur et al., 1989, p. 8). Furthermore, we can distinguish between subjective and objective careers (Bredin & Söderlund, 2013). The subjective career describes an individual's subjective feelings about getting experience, progressing/developing their career, and satisfaction, while the objective

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career refers to the objective descriptions of sequential jobs (Akkermans et al., 2020; Heslin, 2005). It is the subjective PM career choice that is of interest in this study.

The literature on project managers' motivations is rather scant (Akkermans et al., 2020) and less attention has been paid to the stages in person's career before becoming a project manager (Alkhudary & Gardiner, 2021). There is research on educational programmes' ability to reflect industry needs and the impact these programmes have on students' perception of their readiness to do PM jobs. The impact of these programmes on experienced professionals' behaviour toward PM career has also been examined.

Ojiako et al. (2015) addressed university students, comparing the learning experiences of engineering students in South Africa and the UK. Additionally, Borg and Scott-Young (2020) studied whether undergraduate PM degrees in Australia take into consideration industry-required work-readiness attributes. Finally, Burga et al. (2020) studied Canadian undergraduate students' perceptions of their readiness to project work based on three motivations: self-efficacy beliefs, outcome expectations, and personal goals that impact student perceptions. We examine students' intention to pursue a PM career in this study.

Researchers have highlighted that PM programmes focus on technical skills and that there is a lack of emphasis on human and organisational skills (Chen et al., 2019; El-Sabaa, 2001; Fisher, 2011; Lampel, 2001; Ojiako et al., 2015; Ramazani & Jergeas, 2015). These studies were conducted in different cultural and work contexts: Lampel (2001) included participants from the USA, Canada, UK, France, Malaysia, and Japan; Ojiako et al.'s (2015) sample was drawn from South Africa and UK; Ramazani and Jergeas (2015) studied project managers and engineers working in the oil and gas sector in Canada; Chen et al. (2019) studied Chinese construction companies; El-Sabaa (2001) interviewed those working in public and private sector organisations; and Fisher (2011) covered the Telecommunications, Banking, Consultancy and Engineering industries. The focus on technical skills rather than human and organisational skills has created a gap between what educational institutions offer and the skills needed for projects in today's competitive work environment (Nijhuis et al., 2018; Pant & Baroudi, 2008). Thus, it is the role of pedagogy to fill this gap (Cicmil et al., 2006; Winter et al., 2006), and business schools must adapt their course designs, content, and delivery methods to consider both student diversity and industries' expectations and needs (Söderlund & Geraldi, 2012; Söderlund & Maylor, 2012).

To address this knowledge gap and understand students' intentions to do PM work, the analysis needs to be based on students' own skills perception and their motivators. Consequently, in this research we use a skills perspective (El-Sabaa, 2001; Katz, 1974) and self-determination theory (SDT) (Gagné & Deci, 2005). A skills perspective helps us analyse how business school students acquire technical, communication, and leadership skills and self-determination theory (SDT) distinguishes among different motivators. SDT has been mobilised in educational and work contexts such as: work motivation (Gagné & Deci, 2005), students' engagement and optimal learning (Niemiec & Ryan, 2009), and recently to understand students' intention to undertake PM certification (Blomquist et al., 2018). Additionally, it is suitable to address our research problem, that is, to study students' intentions toward a PM career as it covers not only motivations but also skills and behaviours of students.

The literature on PM careers and education does not address the role of the education programmes in forming students' motivations and intentions toward a PM career. Consequently, our study adds value to extant research by exploring not only business school students' experiences/readiness, but also their intention to engage in a PM career. Our research contributes to practice by addressing students' choices to engage in a PM career and proposing pedagogical recommendations that may address PM recruitment needs (PMI, 2017). To summarise, our aim is to answer the following question: What are the main factors that shape the intention of business school students to pursue a PM career? Figure 1 shows our conceptual model.

Students' motivations for a PM career

SDT (Deci & Ryan, 1985, 1991; Ryan & Deci, 2000a, 2002) is a macro-theory of motivation that studies the innate tendencies and psychological needs of people to seek challenges and to engage in new

Figure 1. Conceptual model explaining the intention to pursue a project management career.
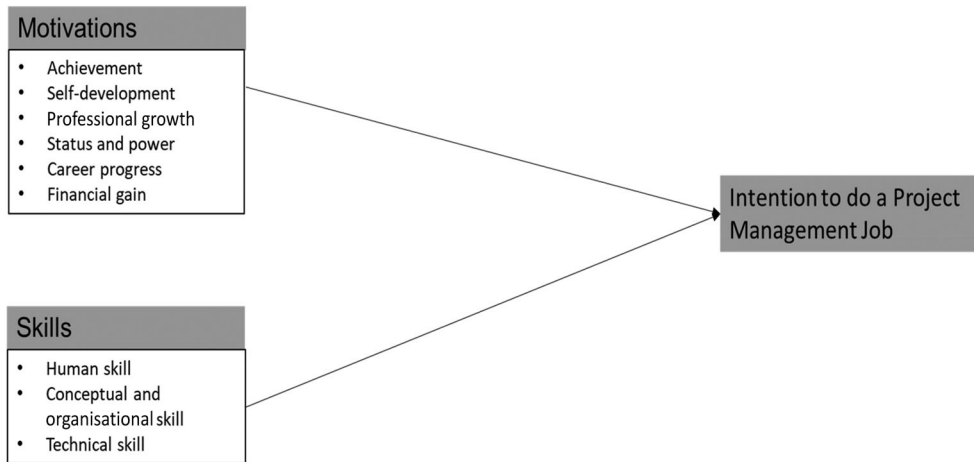
experiences (Deci & Ryan, 1991). While previous theories on individual motivation focused on the quantity of motivation, SDT focuses on the type/quality of motivation to predict outcomes such as learning or effective performance (Deci & Ryan, 2008). In this theory, the individual is conceptualised as intentional and motivated to achieve different objectives (Deci et al., 1996). Deci and Ryan (1985) identified three types of motivation: Internal, external, and amotivation.

Internal motivation refers to behaviours enacted without an external driving force (Ryan & Deci, 2000b). These behaviours have an internal perceived locus of causality, that is, they emerge from the self and not from an external source and are triggered by curiosity and interest (Deci & Ryan, 1985). These motivations could be either intrinsic because they are inherently enjoyable, satisfying, or challenging or refer to integrated regulation (i.e. motivations that are completely internalised) (Deci & Ryan, 1985). Extrinsic motivation is related to behaviours performed to obtain some outcome controlled by environmental factors through social or material rewards or punishment mechanisms (Deci et al., 2017). These motivations are separable from the activity itself (Ryan & Deci, 2000b) and are impacted by external contingencies. SDT distinguishes between two types of external motivation: external and introjected regulations. External motivations are the results of the activity and are completely isolated from the activity. Introjected regulation is a more self-controlled and autonomous form of extrinsic motivation and involves people being focused on approval versus disapproval in their careers and from their leaders (Gagné et al., 2010). Self-control includes processes such as self-esteem, ego involvement, and concerns with status and recognition (Deci et al., 2017). A third group of motivations lies between external and internal motivations and includes identified regulated motivation, which refers to consciously valuing the target behaviour and accepting it as a personally and socially important behaviour, which leads to wholehearted engagement.

Educational programmes might highlight the potential benefits of a profession by citing internal, in-between, and external motivators that show (a) the high demand for project talent, (b) the many diverse personal career paths to becoming a project professional (Madter et al., 2012), (c) the wide range of PM roles in different industries and across organisations, (d) the contributions that PM makes to national productivity, (e) the project manager's role in driving change and innovation in organisations, and (f) the financial rewards given to PM workers (PMI, 2017, a study which covered 11 countries: Australia, Brazil, Canada, China, Germany, India, Japan, Saudi Arabia, UK, USA and UAE). Blomquist et al. (2018) showed that internal motivators are related to the need to challenge oneself or to have a sense of achievement and develop oneself by learning new things such as acquiring PM skills to improve PM performance. In addition, professional affiliation and growth were associated with identified regulation. Finally, external motivators included seeking

career progress and attaining greater recognition/status and influence/power in the organisation and higher pay. They found that all these motivations are positively related to professionals' intention to undertake voluntary PM certification, and that internal and identified regulations are the main motivators for pursuing PM certification. External motivators were relevant but their impact was less pronounced. Whereas such studies have investigated the perceptions, attitudes, and intentions of the professionals, we analyse the intentions of the students, many of whom will become project managers in the future. In a similar way with previous literature, we hypothesise that a positive relationship exists between these motivators and students' intention to pursue a PM career.

In our model, we have included all the motivations, except the improved career skills and affiliation, which are valid motivations for professionals who have chosen a PM career. However, in our case, we are targeting students who are not yet professionals, and consequently we have formulated hypotheses related to intention to undertake a PM career.

Hypotheses related to the intention to undertake a PM career

The following hypotheses were formulated in relation to intention to undertake a PM career:

H1: A student's internal motivator, such as need to achieve or desire for self-development, increases the intention to pursue a PM career.

H2: A student's internal motivator, such as desire for self-development, increases the intention to pursue a PM career.

H3: A student's identified regulation, such as seeking professional growth, increases the intention to pursue a PM career.

H4: A student's external motivator, such as seeking status and power, increases the intention to pursue a PM career.

H5: A student's external motivator, such as career progress, increases the intention to pursue a PM career.

H6: A student's external motivator, such as financial gain, increases the intention to pursue a PM career.

Students' perception of required skills and intention to pursue a PM career

Project managers develop strategies and implement tools and methods to ensure that project goals are achieved. To accomplish these goals, they must demonstrate competency in managing people and processes (El-Sabaa, 2001; Fisher, 2011; Lampel, 2001) and have a specific set of skills (contextual or general) developed through experience and implementation (Edum-Fotwe & McCaffer, 2000). For example, Edum-Fotwe and McCaffer (2000) stressed the importance of technical knowledge and financial and communications skills for construction project management. Independent of the contexts, researchers have pointed to three groups of essential skills: human, conceptual and organisational, and technical (El-Sabaa, 2001; Katz, 1974; Lampel, 2001).

Human skills refer to interpersonal skills needed to work within teams and include being sensitive to individual needs and motivations, and effective communication (El-Sabaa, 2001; Katz, 1974). Conceptual and organisational skills reflect the ability to envision the project as a whole, to recognise the relationships among various functions of a project, and to conceptualise their interdependencies and also take into account the stakeholders. Technical skills involve acquiring knowledge and the analytical ability to apply the required tools and implement techniques specific to the discipline (e.g. construction engineering or information systems) (El-Sabaa, 2001; Katz, 1974).

Educational programmes designed to integrate all these skills will play an important role in preparing future project managers (Ojiako et al., 2015; Ramazani & Jergeas, 2015). These programmes play a role in not only enabling students' needed skills but also influencing their intentions to seek a PM career. Previous research has shown that a student's belief in their ability to accomplish an action or behaviour (i.e. self-efficacy) affects the likelihood of performing successfully within a

domain (Bandura, 1981). More importantly, a student's belief in their skills influences job-search behaviours (Brown et al., 2006). Thus, we formulated the following hypotheses related to the intention to undertake a PM career:

H7: Students' conceptual and organisational skills will increase their intention to pursue a PM career.

H8: Students' technical skills will increase their intention to pursue a PM career.

H9: Students' human skills will increase their intention to pursue a PM career.

Methods

Sample

Using convenience non-probability sampling, we approached 900 students at several business schools in Europe using an online survey link, and 549 students responded to the questionnaire. After deleting the cases that failed the attention check question, a sample of 525 respondents was retained. Descriptive statistics of the students' characteristics are provided in Table 1. Most of the students were from France, China, Colombia (South America), Croatia, Germany, India, Mexico, and Morocco and were studying at different business schools in Europe: 481 of the students were studying at a triple-accredited French business school, and 44 of the students were studying at other business schools in Europe. To address this imbalance, we conducted a multi-group analysis (MGA) by following Henseler's (2007) procedure; this procedure is further explained in the statistical analysis section.

Measurement

We collected demographic information, including gender, age, nationality, work experience, department of study, and year of study. Respondents took an average of 12-to-15 min to complete the survey, which used 7-point Likert-type scales. We also used the measures mentioned in Table 2; the dependent variable was intention to do PM career. We asked the students whether they had previously taken any PM courses, and we used a question to check the students' attention when completing the questionnaire.

Statistical analysis

Partial Least Square-based (PLS-based) Structural Equation Modelling (SEM) was used to analyse both the measurement and the structural model (see Chin, 1998; Falk & Miller, 1992). We tested phenomena in the early stage of development, and the proposed model was not empirically validated; therefore, PLS-SEM was appropriate (see Fornell & Bookstein, 1982; Lowry & Gaskin, 2014). We also used PLS-SEM to conduct an MGA analysis in which we divided the total sample into two subsamples (i.e. students studying in the French business school [Rennes School of Business, RSB] and those studying in other business schools). MGA was used to estimate the path model based on each subsample. Finally, MGA helped us to utilise the bootstrap outcome of each subsample to assess significant differences in the subsamples.

Results

Measurement model results

Reliability and validity of all constructs were tested by running a bootstrapping sample of 5,000. To test the measurement model's reliability and validity, we assessed the convergent validity, reliability, and discriminant validity of all constructs. In Table 3, we present the results of the measurement models. Each construct presented a greater degree of reliability than the recommended threshold of 0.70 (see Chin, 1998).

Table 1. Descriptive statistics of student characteristics.

Variable	Frequency	
Gender		
Male	183	34.90
Female	342	65.10
Age Range		
18-to-24 years	468	89.10
25-to-34 years	56	10.70
35-to-44 years	1	0.20
Study Year		
1st Year of Bachelor's degree	4	0.80
2nd Year of Bachelor's degree	10	1.90
3rd Year of Bachelor's degree	70	13.30
4th Year of Bachelor's degree	24	4.60
1st year of Master's Degree	237	45.10
2nd year of Master's Degree	180	34.30
Experience		
None	68	13.00
Less than 1 year	172	32.80
1 year	120	22.90
2 years	97	18.50
3 years	30	5.70
3-to-5 years	29	5.50
More than 5 years	9	1.60
Department of Study		
Finance or Accounting	49	9.30
Marketing	138	26.30
Human Resources or Management	120	22.90
Information System or Supply Chain	19	3.60
Other	199	37.90
Students' Country of Origin		
Albania	1	0.2
Algeria	2	0.4
Bangladesh	1	0.2
Belgium	5	0.9
Burkina Faso	1	0.2
Central African Republic	1	0.2
China	64	11.7
Colombia	17	3.1
Croatia	21	3.8
Czech Republic	2	0.4
Finland	1	0.2
France	320	58.3
Gabon	1	0.2
Germany	14	2.6
Hungary	1	0.2
India	18	3.3
Indonesia	7	1.3
Iran, Islamic Republic of …	2	0.4
Italy	2	0.4
Kazakhstan	1	0.2
Mexico	12	2.2
Morocco	14	2.6
Nepal	1	0.2
Netherlands	2	0.4
Nigeria	1	0.2
Norway	9	1.6
Poland	3	0.5
Romania	1	0.2
Russia	3	0.5
Serbia	5	0.9
Spain	7	1.3
Thailand	1	0.2
UK	3	0.5
USA	2	0.4

(*Continued*)

Table 1. Continued.

Variable	Frequency	
Taiwan	3	0.5
Country of Study		
Belgium	3	0.5
Croatia	20	3.6
Czech Republic	3	0.5
France	460	83.8
Germany	14	2.6
Greece	3	0.5
Italy	5	0.9
Netherlands	5	0.9
Norway	18	3.3
Poland	4	0.7
Serbia	5	0.9
Spain	5	0.9
UK	4	0.7

The results of discriminant validity are presented in Table 4. The square roots of the average variance extracted (AVE) are presented as the bolded diagonal numbers in the table, and the inter-construct correlations are presented as the off-diagonal numbers. The square roots of AVE are greater than the inter-construct correlations, thus providing evidence of appropriate discriminant validity (see Lowry & Gaskin, 2014). We also followed the procedural remedies suggested by Podsakoff et al. (2003) to reduce the likelihood of common method bias.

The proposed structural model was tested using PLS and a bootstrap sample of 5,000. Path coefficients, significance, and r^2 values are presented in Figure 2. The strength of relationships between the dependent and independent constructs of the proposed model is represented by the path coefficients. Variance explained by independent constructs is represented by the r^2 value.

Achievement, career progress, financial gain, and conceptual and organisational skills did not have any significant relationship with the intention to pursue a PM career (see Figure 2). Self-development was identified as a significant positive predictor of the intention to pursue a PM career ($ß = 0.162$, $p < 0.05$). Also, self-development was found to be moderated by education such that the statistical influence was greater for students with lower educational levels ($ß = −0.090$, $p < 0.05$). In addition, professional growth was identified as a significant positive predictor of the intention to

Figure 2. Results of the study.
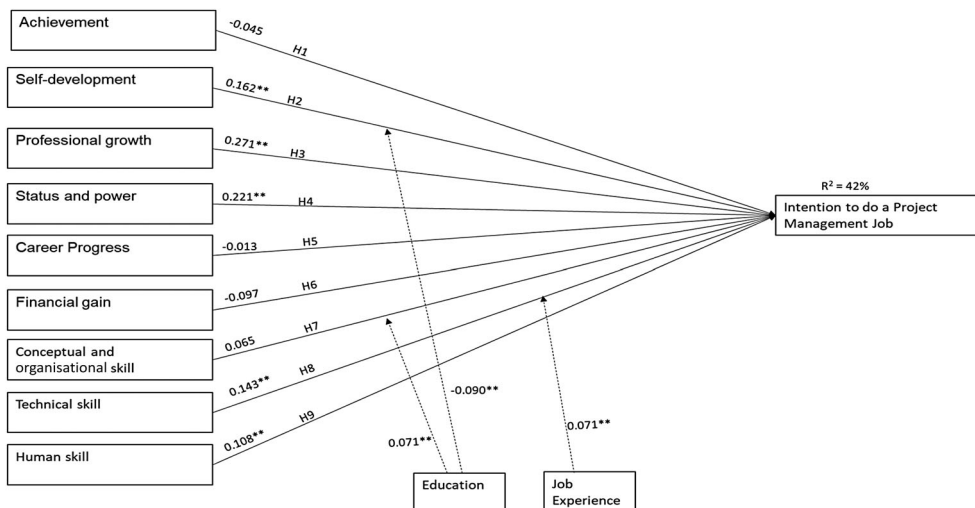
Table 2. Measures used in the study.

Constructs and items	Sources
Intention to Pursue a PM Career	Schierz et al. (2010)
1. Given the opportunity, I will pursue a project management career.	
2. I am likely to pursue a project management career in the near future.	
3. I am willing to pursue a project management career in the near future.	
4. I intend to pursue a project management career when the opportunity arises.	
Achievement	Blomquist et al. (2018)
1. To challenge myself to meet professional standards.	
2. To have my skills independently assessed.	
3. To prove that I can do it.	
4. To provide evidence of a level of proficiency in project management.	
Self-development	Blomquist et al. (2018)
1. To learn about project management.	
2. To increase my knowledge of project management.	
3. To support my continuing education objectives.	
Professional Growth	Blomquist et al. (2018)
1. To become a project management professional.	
2. To signal my commitment to project management.	
3. To signal my commitment to my career.	
Status and Power	Blomquist et al. (2018)
1. To increase my status as a project manager.	
2. To signify a higher level of competence than other project managers.	
3. To improve my visibility within company.	
4. To have line managers listen to my recommendations.	
5. To increase my credibility as a project manager.	
6. To demonstrate my ambition.	
Career Progress	Blomquist et al. (2018)
1. To pursue a better career.	
2. To earn a promotion.	
3. To become more marketable for other careers.	
4. To increase my external mobility.	
5. To keep my career.	
6. To satisfy my boss.	
Financial Gain	Blomquist et al. (2018)
1. To earn more money.	
2. To get more financial benefits.	
3. To get more bonus or commission.	
Human Skill	El-Sabaa (2001)
1. I am able to mobilise the mental and emotional energy to my friends or classmates.	
2. I am able to listen, persuade, and understand what others mean by their behaviour.	
3. I am flexible, patient, and persistent.	
4. I am able to give people the opportunity as group members to participate in making decisions.	
5. Political sensitivity.	
6. High self-esteem.	
7. Enthusiasm.	
8. Planning.	
Conceptual and Organisational Skill	El-Sabaa (2001)
1. Organising.	
2. Strong goal orientation.	
3. Ability to see a group project as a whole.	
4. Ability to visualise the relationship of the project to the industry and the community.	
5. Strong problem orientation.	
Technical Skill	El-Sabaa (2001)
1. Special knowledge in the use of tools and techniques.	
2. Project knowledge.	
3. Understanding methods, processes, and procedures.	
4. Technology required.	
5. Skills in the use of computer.	

pursue a PM career ($ß = 0.271$, $p < 0.05$). Status and power were also found to be significant positive predictors of the intention to undertake a PM career ($ß = 0.221$, $p < 0.05$). Conceptual and organisational skills was found to predict the intention to pursue a PM career when moderated by education, such that the influence was greater for students with higher education levels ($ß = 0.071$, *p*

Table 3. Measurement model results.

Constructs	Mean*	Standard deviation	Composite reliability	AVE
Intention to pursue a PM career	5.06	1.27	0.93	0.78
Achievement	5.29	1.02	0.84	0.57
Self-development	5.46	1.00	0.84	0.65
Professional growth	5.04	1.14	0.84	0.65
Status and power	5.14	1.04	0.89	0.58
Career progress	4.87	1.07	0.87	0.53
Financial gain	4.86	1.43	0.94	0.84
Human skill	5.36	0.79	0.85	0.54
Conceptual and organisational skills	5.31	0.91	0.84	0.51
Technical skills	5.02	0.98	0.89	0.61

*Note: Theoretical Range: 1–7.

Table 4. Discriminant validity of the measurement model.

Constructs	A	CP	CO	FG	HS	IJ	PG	SD	SP	TS
Achievement (A)	**0.757**									
Career progress (CP)	0.589	**0.729**								
Conceptual and organisational skills (CO)	0.351	0.263	**0.716**							
Financial gain (FG)	0.46	0.767	0.175	**0.917**						
Human skills (HS)	0.304	0.237	0.613	0.097	**0.734**					
Intention to pursue a PM career (IJ)	0.437	0.37	0.351	0.253	0.339	**0.881**				
Professional growth (PG)	0.674	0.55	0.274	0.448	0.226	0.546	**0.806**			
Self-development (SD)	0.61	0.462	0.297	0.339	0.257	0.486	0.676	**0.809**		
Status and power (SP)	0.661	0.774	0.281	0.685	0.255	0.464	0.631	0.516	**0.759**	
Technical skills (TS)	0.349	0.327	0.602	0.278	0.511	0.4	0.367	0.301	0.339	**0.782**

< 0.05). Moreover, technical skills was a significant positive predictor of the intention to undertake a PM career ($ß = 0.143$, $p < 0.05$). Also, the influence of technical skills was found to be moderated by career experience such that the influence was greater for students with more career experience ($ß = 0.071$, $p < 0.05$). Finally, human skills was a significant positive predictor of the intention to undertake a PM career ($ß = 0.108$, $p < 0.05$). It appears that professional growth has the highest significant positive statistical influence on the intention to pursue a PM career compared to other independent constructs within our proposed model. The r^2 value of the intention to pursue a PM career is 42%, which means that 42% of the variance in intention to pursue a PM career is explained by the independent constructs of this proposed model.

Moreover, the MGA analysis revealed that there was no significant difference among the path relationships of the RSB subsample and the students studying in other business schools, except for the path coefficient of human skills explaining the intention to pursue a PM career ($ß = 0.378$, $p < 0.05$). This path coefficient was only significant for the RSB students ($ß = 0.128$, $p < 0.05$), and not for the non-RSB students ($ß = -0.250$, ns).

Discussion

Intention to pursue project management careers

We found students' perceptions of their technical and human skills to be significant predictors of their intention to pursue a PM career. This is similar to Burga et al. (2020) who highlighted students' perception of technical knowledge as important for success in PM roles and that their lack will negatively impact readiness for project work. Students' conceptual and organisational skills perception was found not to influence students' intention to pursue a PM career, if not moderated by the level of education. This result is interesting because students with higher levels of education would have deeper knowledge of different organisational functions; thus, their perception of

mastering conceptual and organisational skills increases and shapes their intention to pursue a PM career. This finding is consistent with previous research studies that have underscored the lack of emphasis on human and conceptual skills in PM educational programmes (Pant & Baroudi, 2008). Especially, that these skills have been identified as very important in the career development of project professionals as they help them to seek support from their colleagues when they lack support from their direct line managers (Huemann et al., 2019). A balanced emphasis on these three important sets of skills will lead to graduates with more effective PM readiness (El-Sabaa, 2001; Hartman & Skulmoski, 1999; Katz, 1974; Lampel, 2001).

The statistical influence of technical skills was also found to be moderated by career experience (i.e. the influence is greater for students with more career experience). This result could be interpreted as follows: as students normally work in low levels in the organisational hierarchy, they usually have/need lower team management or organisational skills, which are reserved for higher hierarchical levels in PM career that necessitate more strategic awareness (Madter et al., 2012). The more experience students get at this low hierarchical level, the more value they will attribute to technical skills, a phenomenon called technical myopia (Edum-Fotwe & McCaffer, 2000; Pant & Baroudi, 2008; Turner, 2016). In addition, some motivations such as self-development (internal), professional growth (internal), and status and power (external) have a positive (statistical) influence on the intention to pursue a PM career. The influence of self-development was found to be moderated by education, and the influence is greater for students with lower education levels. This could be explained by the aspiration of those in lower educational levels for more self-development. Students perceive a PM career as supporting self-development because of the multidisciplinary nature of project management (Ika, 2009; Kloppenborg & Opfer, 2002).

Another implication is related to PM permitting professional growth. As derived from the results, students intend to pursue a PM career because of professional growth motivation and because PM has its own body of knowledge, associations, and career development (Madter et al., 2012; Morris et al., 2006). In fact, it appears that professional growth has the highest significant positive (statistical) influence on the intention to undertake a PM career.

Finally, students perceive a project manager as having power and a status-oriented role in today's organisations, and this increases their intention to pursue a PM career as well as voluntary certification (Blomquist et al., 2018). These results are encouraging for the PM profession because it shows students are aware of the advantages and possibilities of practicing a PM career. This constitutes an important milestone toward encouraging them to join the profession. Therefore, this could help in filling the talent gap as highlighted in a recent report (PMI, 2017).

Implications for the design of educational programmes

The implications for the design of educational programmes include the following:

(1) To continue to highlight the importance of human and technical skills to be an effective programme manager.
(2) To act on motivational factors for students to encourage them to join the profession by informing them about:
   (a) the necessity of self-development for a PM career,
   (b) professional growth provided by a PM career, and
   (c) status and power related to a PM career.

Limitations and future research directions

This research was conducted within a European context, which limits its applicability to other contexts with different educational systems, such as Anglophone countries, China, and developing

countries. Also, most of our sample comprised students studying in France, compared to other European countries. Future research could be focused on examining these factors in different contexts. Another limitation of this research is that it was conducted solely within the business school context. Engineering schools and other institutions offer project management-related programmes, and many engineering graduates work as project managers and are certificate holders. Thus, future research can include engineering and other schools or compare these schools with business schools to understand if significant differences exist related to skills and motivations toward the intention of pursuing a PM career. Finally, it will also be necessary to conduct a similar type of study after a gap of years to evaluate the evolution of these programmes and any changes in perception among business school, or other, students.

Conclusion

In this paper, we explored the relevant motivations and skills that affect business school students' intentions to pursue a PM career. An SEM study was conducted to identify important motivations and skills related to pursuing a PM career among students of different business schools within Europe. The results demonstrate that business school students' intentions are predicted by their perceptions of their own technical and human skills. Our findings also emphasise the importance of motivations such as self-development, professional growth, and status and power, which can influence the intention to pursue a PM career. These findings provide useful recommendations that contribute to the development of pedagogical approaches within business schools. Therefore, they also address the PM career talent gaps in the long term.

Data availability statement

Data available on request due to privacy/ethical restrictions. The data that support the findings of this study are available on request from the corresponding author [AN]. The data are not publicly available due to restrictions (e.g. their containing information that could compromise the privacy of research participants). Shared upon request.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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