A STUDY ON LEADERSHIP SKILLS IN PROJECT MANAGEMENT

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ABSTRACT:
Leadership skills are necessary for project management to ensure future project managers can deliver their projects effectively. This paper aims to investigate whether gaps exist between the skills of the graduate project management student with what is expected by the industry once they enter into the project management environment. The objective in this study is achieved through. The findings show that students lack skills in effectively organizing and running a meeting, planning, estimating/scheduling, time management, critical thinking, and interpersonal skills.

INTRODUCTION

Developing project managers' leadership skills with a focus on team performance improvement should be a significant objective in leadership skills development for project managers. With the business environment getting more complex and volatile, the necessity for greater leadership skills in projects increases. The lack of modern approaches by project management professionals in terms of education and training of project leaders are now a much-acknowledged situation [1]. Students must learn the practical skills needed to contribute to the workforce after graduation. It is due to the reason that leadership skills are constantly ignored due to financial constraints. To maintain and meet the demand of the industry, it is important that future project leaders are being trained and equipped with the right skills to succeed.

As the industry is not satisfied with the skills performed by the new entrants, there seems to be a gap between the students' skills and the industry experts. As a consequence of this, high attrition evolves in the industry, which is

detrimental to industrial growth. This is why the gap between industry expectations and the current educational system is analyzed.

This paper aims to study the gaps between the leadership skills of the graduate project management students and the expectation from related industry and the solutions to overcome it. The reviews of leadership skill issues and solutions will be done through literature reviews and supported by the results of an online survey. This paper has raised Two (2) research objectives, which are to propose a solution with regards to leadership skills in project management and to identify the factors contributing to ineffective leadership skills among project managers.

LITERATURE REVIEW
Projects are getting more complicated to manage every year. Project managers must respond quickly to adapt to changing economic, social, and technical circumstances. Projects and other forms of temporary organizations differ from the standard organization. Since most theories of leadership are based on stable work conditions, the growth of temporary organizations poses challenges to leadership theories [4]. Besides, project leadership which involves different people and the management of budgets, resources, and individuals who work together are also an important factor in the organization's success [5]. The current development in project management saw the expected performance of project managers in many projects as less than the actual perceived results. For instance, 68% of all projects are unsuccessful [3]. To overcome the challenge, researchers are in the opinion that there should be an innovative approach towards leadership development in project management [2].

A systematic approach was adopted, and the search criteria addressed the research issues. These parameters were identified as criteria for eligibility:
1. Returned search keyword: leadership; projects, project management;
2. Date of publication from 2010 to 2020;
3. Publications are written in English AND
4. The article addresses leadership in projects/project management.

The source of the articles is Google Scholar, Mendeley and Scopus in March 2020. The results obtained from the search using criteria (i) above were examined to include potential articles using each title, keyword set, and abstract of papers that met the criteria of (ii) and (iii). Due to language and year of publication requirements, the database search provided 43714 articles. The articles have been examined more carefully to achieve the research goals, and 15 papers were chosen for this Literature Review due to their suitability to the issues being discussed.

Theories of Leadership
There are several key leadership theories, which include Great Man Theory, Trait Leadership Theory. Contingency theory, situational theory, and behavioral theory. The Great Man theory assumes that the traits of leadership are intrinsic. At the same time, the Trait Leadership Theory believes that people are either born or are made with certain qualities that will make them

excel in leadership roles. Behavioral Theories offer a new perspective, one that focuses on the behaviors of the leaders as opposed to their mental, physical or social characteristics.

On the other hand, the Contingency Leadership Theory argues that there is no single way of leading and that every leadership style should be based on certain situations, which signifies that there are certain people who perform at the maximum level in certain places; but at minimal performance when taken out of their element. According to Situational Theory, a leader exercises a particular form of leadership based on the maturity level of his or her team.

From the 15 articles reviewed, the six main schools of leadership were discussed in 4 articles. Transformational and transactional leadership were mentioned in 12 out of 15 articles reviewed, while emotional intelligence leadership was mentioned in 2 articles only.

Does Leadership Style Contribute to the Success of the Project?
On the question of whether leadership style contributes to the success of the project, 11 out of 15 articles reviewed agree that leadership style helps to achieve project success. However, this notion has only been assumed and researched in the context of project results [6]. A suitable leadership style can improve project success through teamwork and a direct impact on a certain type of project. According to [3], trained and educated project management students are unable to deal with the increasing complexity of their work environment in today's world. They use only a small amount of current innovative learning environments and techniques. It is, therefore, essential to develop project managers that can address the increasing complexity and uncertainty in projects.

Project Manager Role
From the 15 articles reviewed, the Project Manager's role has been listed as below:
1. Being coaches, facilitators, learning leaders, and developers;
2. Define a project and make it possible for those who can influence the successful implementation of the project to understand its rationale;
3. Helps the project team to articulate, organize, employ, monitor, evaluate and manage the project team's objectives and products from initial project completion to final success;
4. Satisfy several stakeholders ' growing demands, AND
5. To adopt a more holistic view of what project management entails, which requires them to move beyond the iron triangle.

Project Success Factors
The following factors have been cited as the top factors for successful projects from the 15 articles reviewed:
1. A relationship between teamwork and team achievement (including team communication, collaboration, and cohesiveness);
2. Within - time, within - budget and within - quality measures (triple triangle);
3. Stakeholder's satisfaction, end-user satisfaction and team's satisfaction;

4. Clear and concise communication; AND
5. Clearly defined goals and direction.

Project Failure Factors

The following factors have been cited in the 15 articles reviewed as the most popular reasons for project failures:
1. Poor Leadership;
2. Unable to meet the deadline, scope and budget overrun and quality deterioration;
3. Choosing project managers by evaluating their technical skills only;
4. The external client efficiency measures;
5. Legal, political and social repercussions;
6. Failure to align their overall strategic objectives with their project objectives; AND
7. Using the same strategy for all project's syndrome, irrespective of the different components of the projects undertaken.

The above factors show that there exist a lot of problems if a project manager lacks the correct knowledge or expertise. The major drawbacks of project management are loss of resources, problems in scheduling, security issues, and interpersonal conflicts.

Does Leadership Style affect the Relationship among Teams?

8 out of 15 articles reviewed agree that the leadership style affects the relationship among teams. Leadership style is said to:
1. Improve team relations and improve the cohesion of the team;
2. Ensure success and prosperity, develop individuals, teams and an organization and community in which they work;
3. Lead staff to made significant contributions to the project's success, purpose, and importance;
4. Helps other group members to achieve group or organizational objectives in learning processes;
5. Understand that the success of the project is not just the sum of individual contributions; it is the result of a collective effort to include them in a finished product, AND
6. Enhance the commitment of the team members by giving them sufficient freedom to employ techniques, work, and decision – making.

Leadership Skills

Among the most popular leadership skills mentioned in the 15 articles reviewed are:
1. The ability to inspire and motivate others to assume strong core beliefs to produce high-performance results from others;
2. Emphasizes efficient team building and the common purpose or objective between team members;
3. Implicate other people in decision making and implementation;
4. Sustainable leadership coupled with compassion and generosity;
5. Encourage high levels of group solidarity when employees strongly identify with their team and also know that other employees do so;

6. Intellectual, management and emotional skills for social interaction coordination and strengthening team management to generate ideas and facilitate collaboration, which helps stimulate intellectuals and promote collaborations;

7. Effective in communication, inspiring and motivating project groups;

8. Management skills including problem resolution; persuasive public speech, efficient management of the meeting, support the development of employees as well as evaluate their achievements;

9. Apply emotional intelligence concepts;

10. Invites participants who do not participate actively in the project, and encourages them to continue to support the project schedule;

11. Develop a vision strategy and put the strategies into operational proposals and outcomes;

12. Critically assess plans and actions, and provide guidance, build and maintain relationships and emotional resilience to respond to unforeseen events and stress often experienced in projects.

Does communication play an important role in leadership?
4 out of 15 articles reviewed stressed the important role communication plays in a leader where it is said as the factor that can improve the overall project team performance.

Transformational vs. Transactional Leadership
1. Transformational Leadership
The concept of Transformational Leadership has been mentioned in 12 out of 15 articles reviewed. From the articles reviewed, Transformational Leaders are said to:
1. Show charisma, build up pride, respect, confidence and a vision;
2. Inspire and encourage people with high expectations and appropriate models of behavior, and challenges to meet new ideas and approaches;
3. Take care of individual team members concerns;
4. Be more effective to predict project performance;
5. Align followers needs with the responsibilities and objectives of the organization;
6. Support high levels of achievement and team member's satisfaction: collaboration, trust-building attributes;
7. Communicate and dialog in supporting team building and engagement;
8. Create a common vision and strong team members identification built not just concentrating on project completion;
9. Build links between leaders and respective team members to maximize their potential;
10. Correlates better with positive results in supporting, innovative cultures compared to transaction leadership;
11. Focused on the management of human to - people relations;
12. Promoting collective mission and providing an inspiring vision of the future that will improve the confidence and passion of the subordinates; AND

13. Encourage subordinates to challenge traditional approaches and to emphasize the importance of cooperation in new perspectives when solving problems.

2. Transactional Leadership

From the articles reviewed, Transaction Leaders are said to:

1. Use an exchange model with bonuses or positive results;

2. Focused on facilitating tasks in product development;

3. Stresses on rewards;

4. Presents traditional leadership opinions focusing on the contract between the leaders and members;

5. Interact to assign individual tasks and roles only, AND

6. Put pressure on subordinates to achieve their expected objectives through punishment.

METHODS

Questionnaires have been selected for this study as it is reliable and fast method for efficient and timely collection of information from many respondents. By using this method, the researcher will be able to contact multiple participants in several weeks of the survey quickly and effectively. The questionnaire is one of the most frequently used methods of data collection, and thus many new scientists in business and management and other social sciences associate research with questionnaires [7].

The study was conducted among project management students in Asia Pacific University (APU) and project managers and team members within Klang Valley. Purposive sampling is selected as it is likely to be collected based on population characteristics and the purpose of the study. A list of project management teams will be acquired and will be the target respondents of the research. Only active project managers and project team members who are responsible for a project environment will be included.

The respondents from the project managers and team members within Klang Valley will be selected from the middle management level and above. The total number of respondents is 100. The Questionnaires were distributed using google form due to its characteristics, which support faster data retrieval, quick data analysis, and ease of use. An online survey consists of 35 questions was created using Google Form. The online survey invitations were sent out to approximately 100 prospective respondents and received 64 responses. The data from the questionnaires are then collected and transferred to an Excel sheet, and finally, all the tabulated information was transmitted to SPSS.

FINDINGS

Fig. 1 illustrates the Leadership skills which are important in Project Management. The five most important aspects of leadership are highlighted, which are: Time Management; Team Work/Team Participation, Critical Thinking, Planning, Estimate /Scheduling, and; Initiative.

Leadership skills	Mean	SD
Management	6.61	0.94
Team work/Team participation	6.55	0.94
Critical thinking	6.45	1.02
Skill Planning, Estimating/Scheduling	6.44	1.07
Initiative	6.42	0.97
Communication	6.42	1.18
Analytical	6.33	1.04
Active listening	6.31	0.94
skill organizing and running a meeting	6.31	1.04
Motivation	6.30	1.00
Interpersonal	6.27	0.98
Creative thinking	6.27	0.98
Trouble-shooting	6.13	1.15
Adaptability	6.08	1.06
Persuasive Public Speaking	6.08	1.10
IT Skill	5.94	1.08
Research	5.92	1.15
Skill Fostering Employees' Development	5.91	1.16
Following directions	5.89	1.09
Skill Evaluating Employees' Performance	5.77	1.26
Skill_Nontechnical	5.55	1.41

Figure 1 Leadership Skills

Project Resource Management incorporates processes in which the resources needed to complete the project are established, obtained, and handled. It ensures the right resources are available for the project when it is needed. Project Resource Management consists of six (6) processes as shown in Table 1 below:

Table 1 The link between resources process and Leadership Skills

PROCESS	REQUIRED LEADERSHIP SKILL
Plan Resource Management	Management, Critical thinking, Skill Planning, Estimating, Scheduling, Initiative, Analytical, Skill Organizing and Running A Meeting
Estimate Activity Resources	Critical thinking, Skill Planning, Estimating, Scheduling, Initiative, Analytical, Skill Organizing and Running A Meeting
Acquire Resources	Estimating, Communication, Skill Organizing and Running A Meeting
Develop Team	Team work/Team participation, Skill Planning, Initiative, Communication
Manage Team	Management Team, work/Team participation, Skill Planning, Scheduling, Communication, Analytical, Active listening, Skill Organizing and Running A Meeting
Control Resources	Management, Skill Planning, Active listening

According to [8], Leadership is one of the components of the PMI Talent Triangle. Leadership and business intelligence are skills organizations are looking. Members of different companies agree that these competencies will add to the bottom line by promoting long-term strategic goals. Project managers must balance these three competencies in order to be effective [8]. Leadership skill is defined as the ability to effectively use the knowledge of project management to achieve the desired results for the programs or projects. The ten (10) knowledge areas in Project Management Body of Knowledge

(PMBOK) describe many of these necessary project management skills. Without these skills, the projects will be difficult to implement. Although there are many project management skills, project managers still rely on expert analysis to be effective.

Respondents were asked regarding leadership skills that project management graduates lack. Fig.2. shows the list of leadership skills that project management graduates lack.

Questions	Mean	SD
Effectively organizing and running a meeting	5.66	1.3
Planning, estimating/Scheduling	5.66	1.09
Time Management	5.55	1.32
Critical thinking	5.55	1.42
Interpersonal	5.53	1.3
Initiative	5.45	1.28
Communication	5.45	1.37
Persuasive Public Speaking	5.44	1.15
Evaluating employees' performance	5.42	1.12
Analytical	5.39	1.48
Creative thinking	5.39	1.27
Motivation	5.38	1.3
Team work/Team participation	5.33	1.35
Trouble-shooting	5.33	1.38
Active listening	5.28	1.27
Fostering employees' development	5.25	1.44
Adaptability	5.17	1.42
Non-Technical	5.09	1.2
Research	5.06	1.41
Technical Skill	5.02	1.4
Following directions	4.91	1.47

Figure 2 List of Leadership Skills that Project Management Graduates Lack

Both leadership and management skills need to be employed by young graduates when they enter the project management environment. Apart from that, young graduates may also consider major factors such as leader, team member, organizational and environmental characteristics when deciding which leadership style to choose when they enter the project management environment.

Respondents were asked about factors contributing to ineffective leadership skills among project managers. According to the results and as shown in Fig.3., the top five factors contributing towards ineffective leadership skills are gaps in expertise, inadequate exposure during graduate school, lack of training, poor risk management, and inconsistent support from stakeholders. Meanwhile, two (2) aspects show the lower score, lean funding, and low morale.

Questions	Mean	SD
Gaps in expertise.	5.91	1.08
Inadequate exposure during graduate school.	5.73	1.3
Lack of Training	5.67	1.18
Poor risk management.	5.55	0.97
Inconsistent support from stakeholders.	5.39	1.19
Lean funding.	5.31	1.14
Low morale.	5.05	1.41

Figure 3 Top Five Factors Contributing Towards Ineffective Leadership Skills

Respondents were asked regarding how does project management practitioners address leadership skills problems. The findings, as shown in Fig.4. below, demonstrated the ways project management practitioners address leadership skills problems; which are by setting a vision for the team, setting goals, creating a development plan, embracing feedback, and knowing what value you bring to the table.

Questions	Mean	SD
Setting a vision for the team.	6.02	1.15
Setting goals.	6.00	1.27
Creating a development plan.	5.88	1.09
Embracing feedback.	5.83	1.02
Knowing what value you bring to the table.	5.81	1.13
Delegating.	5.8	1.07
Clarifying and adjusting role.	5.72	1.21
Role playing.	5.53	1.18

Figure 4 Ways Project Management Practitioners Address Leadership Skills Problems

Project management heavily relies on people as a common denominator; therefore, project managers need to study people's behavior and motivation. Working with sponsors diligently to align the project strategies is also important. Project manager applies their leadership skills and qualities when working with all project stakeholders. It is then important for project managers to apply effective leadership skills [8]. Ineffective leadership occurs when leaders say one thing and do another. They lost credibility from their subordinates when this occurs in the long run. It is useful to know what characteristics cause unsuccessful leaders because they can provide a benchmark for what leaders cannot do.

CONCLUSION

The study aimed to provide a solution with regards to leadership skills in project management, to identify the factors contributing towards ineffective leadership skills among project managers and to investigate the current methods being used by project management in addressing leadership skills issues. The responses imply that project managers train their employees to lead themselves. An effect is a form of recognition where each employee gets a greater understanding of his thoughts, feelings, and behaviour, and possible results. Employees should work together, including a leader, to build a common culture. Phases in such a process is to understand the strengths of an organization, clarify goals, identify barriers and make use of the toolbox to achieve the goals. By achieving the above-mentioned objectives, the education and technical institution will be able to supply graduates to the industry with the correct leadership skills to manage projects with a focus towards team performance improvement thus enabling significant improvement to the increasingly complex and volatile project environment.

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