ESSENTIAL LEADERSHIP SKILLS FOR PROJECT MANAGERS IN MALAYSIA

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A dissertation submitted in partial fulfilment of the requirements for the degree of Master of Project Management

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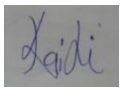
DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

Signature : 

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APPROVAL FOR SUBMISSION

I certify that this project report entitled **"ESSENTIAL LEADERSHIP SKILLS FOR PROJECT MANAGERS IN MALAYSIA"** was prepared by **ANG LI KAI** has met the required standard for submission in partial fulfilment of the requirements for the award of Master of Project Management at Universiti Tunku Abdul Rahman.

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ABSTRACT

A project manager is an individual that is appointed by the performing organization to manage the entire project team that works towards the same direction to achieve the project's goals and objectives (Anantatmula, 2010). Therefore, it is very important for a project manager to equip himself with a lot of skills to become a successful and competent project manager. Despite the importance of the key industry sector such as the manufacturing sector, services sector, construction sector, agriculture sector, and hospitality sector to Malaysia's economic development, there are still many project management problems exist within all these sectors (Tabassi et al., 2019). The lack of competent project managers is one of the main factors that lead to all of these project management problems (Zimmerer and Yasin. 1998). Thus, a total of ten (10) main differences between management skills and leadership skills were identified through comprehensive literature review. Not only that, but there are also nine (9) leadership skills required for project managers and five (5) strategies to improve leadership skills for project managers were identified through comprehensive literature review. This paper adopted quantitative research approach which all the data were obtained from 138 project managers from several industry sectors within Klang Valley region through questionnaire. The data collected was then evaluated by statistical method using Microsoft Office Excel and Statistical Package for the Social Science (SPSS) where appropriate to produce a ranking of all variables. The results of analysis indicate that the code "B.04" or "Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done" has the highest level of agreement as the main differences between managerial skills and leadership skills among the respondents. Meanwhile, the result also revealed that the "C.03" or "Decision-making skill" is the most important skill that a competent project manager should possess. Last but not least, this study empirically demonstrates that code "D.05" or "Extrinsic Reward" is the most effective strategy to improve leadership skills for project managers. In a nutshell, this study has resulted in a useful list of main differences between managerial skills and leadership skills that is relevant to the Malaysian industry sector. Not only that, the list of strategies to improve

leadership skills for project managers can also be utilised as reference points for the employers in Malaysian industry sector to improve project managers' leadership skills in the future.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This is the introductory chapter for this research. Section 1.2 describes the background information of essential leadership skills for project managers in Malaysia. Section 1.3 is followed by the problem statement of this research. The research aim is defined in Section 1.4 and the research objectives are discussed in Section 1.5. The research methods applied in this research are reviewed in Section 1.6 while the scope and limitations of the study are covered in Section 1.7. Lastly, Section 1.8 ends this chapter with a brief description of the structure of this report.

1.2 Research Background

A project manager is an individual that is appointed by the performing organization to manage the entire project team that works towards the same direction to achieve the project's goals and objectives (Anantatmula, 2010). The project manager is normally considered as the important "bridge" between the upper management and the project team members. Therefore, it is very important for a project manager to equip himself with a lot of skills to become a successful and competent project manager. Successful project managers are those who have both excellent management skills as well as effective leadership skills (Kumar, 2009). Leadership skills are totally different from management skills. A project manager that is good at managing the project does not reflect that he is a competent leader. Basically, strong management skills can be developed through working experience and work practices (Kumar, 2009). Leadership skills can be obtained by developing the leadership qualities throughout the project. Some of the important leadership skills in managing projects include negotiation skills, planning skills, communication skills, team-building skills, problem-solving skills, listening skills, and influencing skills (Zakaria et al, 2015).

With project managers implementing best practices in the industry sectors, it has shown that there is an increase in project success rates in recent

years (Kumar, 2009). This is mainly due to the fact that most of the project managers in Malaysia's job sectors have mastered the implementation of project management approaches. At the same time, project managers also fully utilized the technological advancements that are available within our country (Anantatmula, 2008). Despite higher project success rates and more technological advancements tools to improve the project success rate, many of the organizations still confront numerous complicated obstacles in identifying and accomplishing their project goals (Kumar, 2009). One of the main reasons is because lack of "leadership" in the project manager. Hence, this research intends to examine the leadership skills required for project managers to manage their project team members effectively and efficiently. Apart from that, the objective of this paper is to examine how leadership skills are able to turn a successful project manager into an effective leader that is able to deliver the project more successfully. Last but not least, it is also the objective of this paper to show the main differences between management skills and leadership skills.

1.3 Problem Statement

Every project is unique in terms of its location, personnel management, supply chain management, financial management, and overall project management (Dalcher, 2012). It is an incontrovertible fact that a large portion of these management processes entail the selection of project managers to manage and implement the necessary action to put things into motion. A competent project manager is an essential part of the successful implementation of any team's operations (Kowang, 2021). That being said, the leadership skills of the project manager can make or break the team management's target objective.

Despite the importance of the key industry sector such as the manufacturing sector, services sector, construction sector, agriculture sector, and hospitality sector to Malaysia's economic development, there are still many project management problems that exist within all these sectors (Tabassi et al., 2019). To be more precise, project management problems include failure to derive project objectives, lack of visibility on the resources planning, lack of team communication, lack of flexibility, poor risk management, poor stakeholder management, poor procurement management, poor claim management, and unreasonable cost projections (Tabassi et al., 2019). The lack

of competent project managers is one of the main factors that lead to all of these project management problems (Zimmerer and Yasin. 1998). This simply indicates that the main reason that leads to project failure is the lack of "leadership" in project manager. It is important for project managers to develop leadership skills so that they can deliver the projects more successfully.

In this modern era, the reliance on technology has resulted in the neglect of leadership skills. Although technology may cope with the lack of hard skills that every project manager should possess, it is still unable to develop leadership skills in project managers. According to a survey, there are 44% of American executives strongly agreed that lack of soft skills especially leadership skills was a serious gap in the United States workforce (ATD, 2022). As with other countries, Malaysia tends to provide education to develop employees' leadership skills. However, Affandi et al., (2012) discovered that there was no strong connection between universities and industry in improving fresh graduates' leadership skills.

There is much previous research had been conducted on the leadership skills required for project managers to manage their projects in an effective and efficient manner. For example, some of the leadership skills required by a competent project manager are not limited to communication skills, problem-solving skills, negotiation skills, planning skills, and team-building skills. However, the main differences between managerial skills and leadership skills had rarely been researched upon. Likewise, there is rarely any research on the strategies to improve leadership skills for project managers in the context of Malaysian industry sectors. By implementing the leadership skills, the project manager will have the ability in leading, planning, coordinating, moderating, and controlling the entire project team (Ahmed, Azmi, and Masood, 2013). That being said, these are two of the research gaps remain unknown that need to be explored further in this study. It is vital to identify the research questions as follows:

1. What are the main differences between management skills and leadership skills?
2. What are the leadership skills required for a project manager to manage their project in an effective and efficient manner?

3. How are the leadership skills able to turn a successful project manager into an effective and efficient leader?

1.4 Research Aim

The primary aim of this research is to explore the leadership skills required for project managers and the ways to improve leadership skills for project managers in Malaysia.

1.5 Research Objectives

The research has three objectives:

i. To identify the main differences between managerial skills and leadership skills.
ii. To examine the leadership skills required for project managers to manage their project in an effective and efficient manner.
iii. To investigate the strategies on how to improve leadership skills for project managers.

1.6 Brief Research Methodology

This research is exploratory in nature. Generally, there are two (2) types of data collecting being applied to this study, which include primary data and secondary data. Primary data is obtained from the questionnaires survey. The main purpose of the questionnaire survey is to collect data and information regarding the leadership skills required for project managers to manage their projects in an effective and efficient manner, and strategies on how the leadership skills able to turn a successful project manager into effective and efficient leaders. The questionnaire survey will be sent and focused on the project managers in Malaysia who are working in the different industry sectors by using Google Form, LinkedIn, and email. The main reason for adopting the questionnaire survey is because it may reach people quickly by just texting the respondents the website link to answer. Moreover, questionnaire surveys provide flexibility for respondents over where and when to complete their questionnaire. Meanwhile, the secondary data is obtained from the literature review such as journals, articles, and reference books. The main purpose of collecting secondary data is to obtain literature data from previously generated sources or

the principle of firstly use and future use. To be more specific, the quantitative research method will be adopted for this research, which is ideal for large samples of research. Upon collection of primary and secondary data, further analysis will be carried out by using statistical tests and correlation tests to assist this research to justify the possible analyse outcome to support the objective of this research. The research method conducted to achieve the research objectives are summarized in Table 1.1.

Table 1.1 : Summary of Research Methodology.

Research Objective	Research Method (s)
RO 1: To identify the main differences between managerial skills and leadership skills.	Literature Review, Questionnaire Survey and Data Analysis
RO 2: To examine the leadership skills required for project managers to manage their projects in an effective and efficient manner.	Literature Review, Questionnaire Survey and Data Analysis
RO 3: To investigate the strategies on how to improve leadership skills for project managers.	Literature Review, Questionnaire Survey and Data Analysis

1.7 Research Scope

This study focuses solely on project managers based in the Klang Valley region. The key motive for selecting respondents from Klang Valley is because it is one of the fastest booming metropolitan regions in Southeast Asia, both in terms of population and economic growth. Meanwhile, the potential respondents for the survey questionnaire are generally project managers from different industry sector such as construction industry, marketing industry, education industry,

manufacturing industry, health care industry and so on to get their opinions regarding the three (3) objectives that related to the topic of "Essential Leadership Skills for Project Manager in Malaysia". Not only that, but the respondents must be ranged from junior-level project managers to director-level project managers.

1.8 Chapter Outline

This sub-chapter gives an overview of the structure of this research. Generally, this research is structured into five chapters. Chapter 1 provides a general view of the research conducted. The background study of essential leadership skills required by project managers and problem statements of this research are illustrated. Besides, the aim and objectives of this research are mentioned in Chapter 1 as well. The research methodology used and the research scope for this research are also highlighted in this chapter.

Chapter 2 focuses more on the literature review which has been examined and discussed. First of all, the overview of the main differences between managerial skills and leadership skills are explained. The leadership theories in project managers are then covered in this chapter as the second topic. Not only that, but the concept of leadership skill is also covered in this chapter as well. The third topic is to identify the key element of life skills, social skills, and people skills which required by project manager. The fourth topic to be covered is the essential leadership skills required by the project managers. Meanwhile, the last topic to be covered is the strategies to improve leadership skills for project managers in Malaysia.

Chapter 3 described the research methodology adopted in detail. The research method and survey instrument used to collect data are introduced and justified. Methods applied to evaluate data collected will also be outlined in this chapter. The research flow is illustrated in the last section of the chapter.

Chapter 4 focuses more on data interpretation. All the results and information obtained from the survey research will be analyzed. There will be a detailed discussion of the data collected. Lastly, Chapter 5 concluded the overall study of the research. The research aims and objectives of this research are fulfilled at this point through this study. The limitations of the research are unveiled follows by recommendations for future investigation.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter provides a summary of the literature related to essential leadership skills for project managers in Malaysia. Basically, it is divided into six sections. Section 2.2 summarizes the main differences between managerial skills and leadership skills. Meanwhile, Section 2.3 explains the leadership theories related to the project managers. The concept of leadership skills is elaborated in Section 2.4. Not only that, but the leadership skills required for project managers to manage their projects in an effective and efficient manner are discussed in Section 2.5 followed by the strategies to improve leadership skills for project managers in Section 2.6. Lastly, this chapter is wrapped up with a summary in Section 2.7.

2.2 Main Differences Between Managerial Skills and Leadership Skills

What is the difference between leadership and management? It is one of the questions that have been asked by most of us more than once and also answered in different ways. Although management and leadership are not synonymous, they are still inextricably linked and complementary. In other words, leadership and management are inseparable in nature. If there is management, there is leadership. There is a lot of confusion and overlaps in terms of leadership and management. On top of that, there is a continuing controversy about the difference between leadership and management (Wajdi, 2017). However, there are actually prominent differences between leadership and management, and often overlooked by us when comparing both of them. In the following sub-section, this paper will address and compare fundamental definitions of leadership and management, as well as discuss the main differences between managerial skills and leadership skills.

2.2.1 Definition of Leadership

The term “leadership” can be defined as the ability for collective action to vitalize (Kotter, 1990). Leadership may also be defined as people who serve others and expect others to follow them (Bennis and Nanus, 1997). On top of that, Peter Drucker defined a leader as someone who has followers (Drucker, 1999). Apart from this, leadership has been defined as the ability to influence others, so that the objectives are met voluntarily and wholeheartedly (Liphadzi, Aigbavboa, and Thwala, 2017). According to Northouse (2001), leadership can be defined as a technique in which leaders may influence other persons to attain or acquire mutually desired results. However, some theorists strongly argue that leadership is a type of social influence mechanism. Although there are several definitions of leadership, the majority of the definitions still concentrate on two components: the process of motivating a group of people to achieve a common goal and objective; and to formulate a vision.

In today’s dynamic workplace, we need leaders who can both challenge the status quo and inspire organization members (Lunenburg, 2011). Most of us have misunderstood that a leader must be someone in a management position. The truth is leadership can always be performed by people who are not even in management positions. Leaders normally will have a vision of what can be accomplished, convey it to others, and develop strategies for achieving the goal. They are capable of motivating others and negotiating for resources, including other forms of support in order to attain the organization’s objective. In other words, the leaders have to set a direction for the rest of the followers; they need to see what lies ahead; they need to visualize what the entire team might achieve; they also encourage the followers and inspire them. Without leaders, a group of people soon degenerates into debate and disagreement (Liphadzi, Aigbavboa, and Thwala, 2015). This is mainly due to the fact that all people tend to perceive things differently and lean toward varied solutions. In short, leadership helps in directing and coordinating team efforts in the same direction. Leadership is totally different from management, as leadership is one of the most important elements of management.

2.2.2 Definition of Management

The phrase “management” is defined as the exercise of responsibility for a community or organization via executive, administrative, and supervisory roles (Katz, 1955). Katz strongly believed that management responsibilities are often task-oriented, and it normally includes training personnel, mentoring high-potential staff, and settling disagreements while upholding morality and discipline (Katz, 1955). Meanwhile, Kotter described “management” as a profession that is responsible for the planning, organizing, budgeting, coordinating, monitoring, and controlling of an operation for a company or organization (Kotter, 2001). On top of that, Northouse viewed “management” as a specific process that achieves a predefined company’s or organization’s goal via the effective and efficient utilization of resources (Northouse, 2019). In addition, Kappa states that “management” is a type of service which manages the community in an efficient and reliable manner (Algahtani, 2014). Despite the fact that there are several definitions of management, most of the definitions are similar and identical. In short, management is a process that is applied, utilized, and performed to attain organizational goals.

Management can be normally found in all types of industry sectors including private sectors and public sectors (Johnson and Dobni, 2015). To be more precise, management exists in a wide variety of industries such as the manufacturing industry, agriculture industry, computer and information technology industry, education industry, entertainment industry, fashion industry, finance and economic industry, food and beverage industry, health care industry, hospitality industry, mining industry, pharmaceutical industry, telecommunication industry, transportation industry, and law consulting industry. There is no exception for the construction industry. As we all know, most of the construction projects typically involve planning phase, design phase, pre-construction phase, procurement phase, construction phase, and post-construction phase (ELZomor and Parrish, 2016). This includes all types of construction projects such as general construction, specialized construction, or heavy construction. All of these construction projects required the project manager to facilitate the preparation of designs, acquire and allocate project resources, establish overall work schedule and milestone deadlines, supervise construction operations, and ensure that construction personnel on the

construction site follow the law and regulations set by the government (Haron et al., 2017). On top of that, these tasks required "management" in order for the project manager to get their work done. Therefore, Kotter defined managers as individuals that need to focus on formal directing and controlling of their resources, structures, and systems (Kotter, 2001). Managers even strive to achieve short-term objectives, prevent risks, and promote standards in order to increase project efficiency and effectiveness.

An effective manager requires three distinct skill sets which include technical skill set, human skill set, and conceptual skill set (Algahtani, 2014). Technical skill refers to mastery and proficiency in a specific sort of task (Hysong, 2008). This also incorporates skills within a specialized field or the ability to apply competent tools and techniques. According to the research conducted by Hysong (2008), the findings revealed that technical skill is necessary for managerial performance. Although the need for technical skill depends on the level of management in that particular organization, technical skill still can be a good asset to good management especially at the lower levels of management. Besides lower levels of management, technical skills are also vital for first-tier managers as they perform various crucial tasks such as communicating successfully with colleagues, verifying the validity of decisions that the employees make, and implementing subsequent decisions based on ideology from employees. As previously mentioned, human skill is also one of the distinct skills set for an effective manager. Human skill is referred to the ability to work with subordinates, which allows the manager to assist group members in getting the job done (Mukarromah, Mudjito, and Purbaningrum, 2019). Human skill is also a necessary working skill needed by a manager to work with others, understand others, and motivate others. Last but not least, conceptual skill refers to the aptitude to integrate organizational benefits and operations with the brain (Phoosawad, Fongsuwan, and Trimetsoon, 2014). This conceptual skill within a manager's mind could enable one to envisage overall organizational functions and work towards predetermined goals.

2.2.3 Comparison between Leadership and Management

Different people have used the terms “leadership” and “management” in different ways. While some people use these two phases as synonymous terms, “leadership” and “management” are actually two entirely different concepts. Although “leadership” and “management” possess many similar duties such as working with colleagues and influencing people to accomplish pre-determined goals, both of them still comprise distinct functions (Wajdi, 2017). On top of that, one may think that all managers are leaders, but this is not the case as some of the managers do not practice leadership. Conversely, some leaders can even lead a team or organization despite not holding any managerial positions. In simpler terms, someone being in the managerial role is a leader and this leader is not totally devoted to management, yet leadership can be accomplished by those who are not holding the managerial role. Therefore, what are the differences between leadership and management? The following paragraphs will address and provide a broad view of the differences between leadership and management.

First and foremost, there are significant differences between leadership and management in a multifaceted working environment. One of the main differences between leadership and management is that a leader normally focuses on doing the right things while a manager focuses on doing the things right (Ahmed, Azmi, and Masood, 2013). To be more precise, a leader focuses on delivering the project in a more effective way while a manager focuses on delivering the project in a more efficient way. Besides that, a project leader determines the vision for the project, gathers resources, motivates, and inspires the entire project team to do the right things so that the project objectives can be attained. Leaders also put emphasis on what has to be done but managers emphasize on how things are done (Ahmed, Azmi, and Masood, 2013).

Other than that, leaders often will advocate change and suggest innovative ideas throughout the entire project (Wajdi, 2017). The managers prefer to work in a completely different style from leaders as they promote stability and exercise authority to get their projects done. Hence, each organization will normally acquire both leaders and managers separately as both of them are different types of people. At the end of the day, it is a must for leaders and managers to possess both skills to deal with the rapidly increasing

competitiveness and volatile challenges of the 21st century. In addition, leaders often serve subordinates in order to gain followers through valuing, trusting, and respecting every employee they met (Ahmed, Azmi, and Masood, 2013). Contrarily, the managers typically serve superordinate, particularly those stakeholders with a superior position in that particular project.

Moreover, the leaders and managers also vary in terms of chaos, psyches, and decision-making style (Ahmed, Azmi, and Masood, 2013). For example, the leaders tolerate chaos and would not announce any decision before thoroughly understanding the problems or difficulties that arise in the project. On the contrary, the managers engage in technique, promote stability and control, and strive to solve the problems or difficulties instinctively, even before thoroughly understanding them. Another difference between leadership and management is that the leader focuses more on communication, motivation, and predetermined goals whilst the manager is concerned with organizational structure and system (Wajdi, 2017).

Apart from that, most leaders strongly believe in visions and goals (Covey, 2003). Leaders are also those who have strong values and work to ensure that their followers are moving in the correct direction for realizing the vision. In addition to this, leaders are viewed as good communicators and motivators because they tend to spend most of their time with followers (Hull and Ozeroff, 2004). In order for leaders to motivate their followers, leaders need to be aware of their followers' professional capabilities, shortcomings, emotional attitudes, and roles in that particular project. Leaders are also accountable for ensuring that the entire organization is prepared to meet any unexpected transformation and foster a sense of security. On another note, leaders are responsible to negotiate for resources such as human resources, material resources, software resources, and plant machinery resources for that specific project (Wajdi, 2017). In contrast, managers have to ensure that all the available resources are well organized and place those resources at the right time and at the right place. The main reason for doing so is to make sure all acquired resources are utilized effectively and efficiently so that better results can be delivered to the project. Moreover, managers are constantly responsible for an organization's planning, organizing, budgeting, coordinating, and monitoring (Kotter, 2001).

Over and above, the next difference is that managers have subordinates whereas leaders have followers (Algahtani, 2014). The majority of the managers will have subordinates unless their title is honorary and granted as an indication of seniority. Leaders seldom have subordinates, especially when they are in charge of a project. Some organizational leaders do have subordinates simply because they are also playing the managerial role in that project. When leaders wish to lead a project, they have no choice but to relinquish formal authoritarian control. This is due to the fact that leading implies having followers as a team, and following a leader is always a voluntary act by their followers.

The difference mentioned above also links to another difference, which is their working style. As we all know, managers are usually given authority by the organization to manage the project. Most of their subordinates will follow the manager's order not because they are blind robots, but because they have been offered incentives such as a salary for doing it. Hence, this kind of working style adopted by managers is known as the authoritarian style mixed with transactional management (Liphadzi, Aigbavboa, and Thwala, 2015). On the contrary, leaders nowadays are adopting a charismatic style mixed with transformational leadership (Algahtani, 2014). Leaders with greater charisma always have a better chance of attracting followers to work together towards the same direction. They tend to offer transformational benefits as part of their persuasion. For example, leaders will promise that followers would not only receive extrinsic rewards but will become better people as the project progresses.

In addition, leaders are more concerned about people while managers are concerned more about work (Wajdi, 2017). As already indicated, most of the leaders have a charismatic style to some measure. This does not directly imply that those leaders have a loud personality. They do not speak in a loud and confident manner that irritates others. Leaders are super friendly with people and have calm personalities that always give credit to their followers. To maintain the mystique of leadership, there are certain leaders who tend to keep a distance from their followers (Wajdi, 2017). For managers, they tend to focus more on their work as they are normally hired to get their work done. They are frequently required to accomplish their projects within tight schedules and budget limitations. Hence, managers normally put more focus on their work rather than on subordinates.

Last but not least, another difference is that most leaders are classified as risk-seeking whereas managers are described as risk-averse (Algahtani, 2014). To be more precise, leaders are comfortable with risk and always will identify ideas that can be used as risk mitigation. In other terms, leaders tend to take a high-risk approach when it comes to solving problems. Contrariwise, managers tend to seek comfort rather than risk. When it comes to problem solving, managers tend to take a low-risk approach. Also, managers would do everything they can to avoid conflict rather than solve the conflict.

In summary, despite leadership and management having roughly similar roles, it is still very vital to distinguish between these two functions. As previously mentioned, management functions conceivably deliver leadership whereas leadership activities are beneficial to management. Nonetheless, there are still some managers struggling to lead and some leaders who fail to manage. In today's complex and volatile working environment, most of the organizations undoubtedly require the support of both effective leaders and managers (Liphadzi, Aigbavboa, and Thwala, 2015). Leaders are crucial in dealing with the new challenges and transforming organizations to become more competitive in the working industry (Algahtani, 2014). Managers also play an important role in the organization to ensure the workplace is running smoothly and to utilize all acquired resources effectively. An individual can always choose to be a successful leader, a successful manager, or even both of them at the same time (Liphadzi, Aigbavboa, and Thwala, 2015). However, both of these positions demand familiarity with slightly different sets of abilities and skills. In other words, it is important for an individual to understand the notions of leadership and management in order to become a successful leader or manager. With the mastery of both of these abilities and skills, one could skillfully handle the areas of both leadership and management in an organization (Lunenburg, 2011). It is sometimes as simple as determining which area is the most suited for the scenario and pushing oneself forward into a leadership or managerial position. In short, an organization's optimal effectiveness can only be achieved if the organization acquired both effective leaders and effective managers (Kotterman, 2006).

2.3 Concept of Leadership Skill

Leadership is normally regarded as a soft skill rather than a hard skill. Soft skill normally refers to a wide range of skills, abilities, attitudes, and behaviour that enable team members to navigate, work, and achieve in the workplace (Moore, Lippman, and Ryberg, 2015). To cut a long story short, soft skills consist of three (3) primary elements which consist of life, social, and people skills. According to the World Health Organization (2003), life skills and social skills are vital soft skills that can help project managers to overcome challenging environments. To be more precise, life skills are the ability to adopt a positive attitude. Social skills are a kind of social interaction along with communication to develop relationships. Whereas people skills are known as personal effectiveness and interaction skills. With that being said, three of these skills are the key soft skills that support project managers' daily activities. Table 2.1 shows the key elements of each life, social, and people skills that are required by a competent project manager.

Table 2.1 :Key Element of Life, Social and People Skill.

Life Skill	Social Skill	People Skill
Critical thinking	Coaching	Building trust
Decision making	Coordination	Communication
Problem solving	Negotiation	Empathize
Self-management	Persuasion	Understanding

2.3.1 Life Skill

Life skill is the ability to adapt and behave constructively, which enables an individual to effectively handle life's goals and face life's challenges (World Health Organization, 2003). That being said, life skill is also a type of psychosocial skill. The concept of life skills normally acts as the linkage between knowledge, motivation, attitudes, values, and positive behaviour. The transformation of the linkage ranges from "what is known?" to "what to believe?" and concludes with "what to do?" (Chan and Briceño, 2019).

The World Health Organization (2003) concluded that life skills comprised of communication skills, interpersonal skills, decision-making skills, critical thinking skills, and self-management skills. It is an undeniable fact that

these life skills are vital in building confidence and managing personnel's emotions as well as their stress. In short, life skills can be known as an interpersonal skill that is essential to build relationships among team members in order to establish a successful and cohesive team.

2.3.2 Social Skill

Social skills can be defined as the ability to get along with other personnel (Moore, Lippman, and Ryberg, 2015). This skill is important to establish and maintain the relationship among the project stakeholders. Strong social skills are advantageous not only to the project manager's career path, but also to the project manager's lifestyle. To be more precise, social skills actually comprise coordination, coaching, negotiation, and persuasion. Basic social skills are not only required for interpersonal communication but also for the development of an effective team (Peterson et al., 2001).

2.3.3 People Skill

People skills can be described as the abilities that allow an individual to inspire others and spread positivity (Cowie, 2003). Some of the examples of people skills are listening attentively, positive attitude, being articulate, power of influencing, being supportive, motivational, adaptable, and flexible. Having strong people skills are a must for a project manager due to a variety of reasons. One of the reasons is because these skills will allow the project manager to minimize conflict throughout a project. By doing so, it can actually enable team members to communicate well as well as build trust among team members.

2.4 Essential Leadership Skills Required by Project Manager

Generally, the phrase "skill" can be defined as the abilities, expertise, and skills of an individual (Ulrich et al., 1995). The concept of leadership skill is also widely recognized as a person's technical and motivational desire to succeed in the workplace (Gangani, McLean, and Braden, 2008). It is an irrefutable reality that experience, efficiency, efficacy, and effectiveness are all regarded as the limbs of skill in today's workplace. However, from the perspective of an employer, leadership skill is one of the most important traits that a competent project manager must display in order to achieve organizational goals and objectives (Gangani, McLean, and Braden, 2008). To be more precise, the project manager's leadership skills are interrelated with their ability to make quick judgements, as well as having a great understanding regarding the roles and responsibilities of all the team members involved in the project (Thi and Swierczek, 2010). That being said, a competent project manager should always strive to improve leadership skills from time to time.

With project management experts implementing best practices in their projects, the project success rates have improved a lot in recent years (Khrais and Alkhatib, 2022). Not only that, but project managers also utilized the technological advancement tools as incorporated in effective project management. Despite a higher project success rate and technologically advanced tools to enhance team productivity, projects nowadays still encounter several complicated obstacles in formulating and attaining their strategic goals. One of the main reasons is because lack of "leadership" in the organization (Ahmed, Azmi, and Masood, 2013). In fact, organizations required effective leaders to successfully implement their strategic goals through initiatives and programs. To be more precise, a well-performed organization will always require a competent project manager who is also a strong leader at the same time (Kumar, 2019). What are the necessary leadership skills required for project managers? Is that true that project management skills alone are insufficient for project managers to perform well? These are some of the questions that organizations should explore in order to further improve the work performance of project managers.

It is an undeniable fact that managers must employ a wide range of skills in order to be effective in planning, organizing, leading, and controlling. A skill

is the ability to do a task competently. To be more precise, leadership skills can be subdivided into three basic categories: technical skills, human relation skills, and conceptual skills. Depending on the nature and size of the project, the leadership skills required for the project manager may be different (Irfan et al., 2021). In other words, the degree to which each type of skill is employed depends on the level of the manager's position. Without further ado, Table 2.2 below tabulates the list of both core and functional skills required by a competent project manager.

Table 2.2 :List of Core and Functional Skills Required by Project Manager (International Atomic Energy Agency, 2016).

Core skills	Functional skills
Achieving results	Analytical thinking
Communication	Change management
Planning and organizing	Client orientation
Teamwork	Decision making
	Knowledge sharing
	Persuasion
	Resilience
	Supervising
	Team Building
	Technical credibility

Numerous studies highlighted the importance and enhancement of skill required by a competent project manager. The studied skills summary is presented in Table 2.3 below. Most of the studies emphasize focus on the skills similar to International Atomic Energy Agency (2016) capability set. Meanwhile, the leadership skills required for a competent project manager will be discussed in a detailed manner in the subsections that follow.

Table 2.3: Summary of Studied Leadership Skills.

Item	Author	Studied Leadership Skills
1.	Elmezain, Baduruzzaman, and Khoiry (2021)	Conceptual skill, human skill, political skill, technical skill
2.	Alshammari, Yahya, and Binti Haron (2020)	Communication, teamwork, team building, planning & coordination, problem solving, interpersonal skill
3.	Kurse (2020)	Creativity, persuasion, collaboration, adaptability, emotional intelligence
4.	Giri (2019)	Planning, organizing, leadership, controlling, technical knowledge skill, team building, communication, interpersonal skill, ability to handle stress, problem solving skill, time management
5.	Foster, Wiczer, and Eberhardt (2019)	Communication, enthusiasms, teamwork, networking, problem-solving, critical thinking, professionalism
6.	Lavender (2019)	Teamwork, communication, work ethic, flexibility, adaptability, time management, empathy, self-confident, positive attitude
7.	Apodaca (2019)	Communication, empathy, adaptable, flexible, assertiveness, problem-solving, leadership, negotiation
8.	Low, Gao, and Ng (2019)	Resilience, curiosity, adaptability, insight, empathy, emotional sensing, entrepreneur-thinking, pursuing conviction, vision
9.	Zuo et al., (2018)	Communication, leadership, conflict management, motivation, teamwork
10.	Gray (2016)	Complex problem-solving, coordination, people management, critical thinking, negotiation, quality control, service

		orientation, decision making, active listening, creativity
11.	IPMA (2015)	Personal integrity & reliability, self-management, communication, relationships & engagement, leadership, teamwork, negotiation
12.	Zakaria et al., (2015)	Communication, problem solving, decision making, team building, conflict resolution, planning & goal setting, sense of responsibility, time management
13.	Awan, Ahmed, and Zulqarnain (2015)	Communication, interpersonal skill, coordination, team building, delegation skill, problem finding, analysing skill, solving skill
14.	Mishra (2014)	Communication, problem-solving skill, conflict solving, interpersonal skill, teamwork
15.	Seetha (2014)	Communication, positive attitude, leadership, analytical and problem-solving, teamwork, interpersonal skill, social skill
16.	Sumner and Powell (2013)	Communication, conflict resolution skill, planning skill, influence skill, skills for dealing with human factor
17.	Zhang, Zuo and Zillante (2013)	Conflict management, teamwork, cooperation, change management, influence skill, leadership
18.	Robles (2012)	Integrity, communication, courtesy, responsibility, interpersonal skill, positive attitude, professionalism, flexibility, teamwork, work ethic
19.	Babic and Slavkovic (2011)	Enthusiasm, teamwork, flexibility, communication, coordination and

		organization, time management, creativity, negotiation, analytical skill, leadership
20.	Shi and Chen (2006)	Communication, coordination, team building, delegation, problem finding, interpersonal skill, analyzing & solving skill
21.	Dainty, Cheng, and Moore (2005)	Team building, leadership, decision making, mutuality and approachability, honesty and integrity, communication
22.	El-Sabaa (2001)	Communication, coping with situations, delegating authority, displaying political sensitivity, maintaining high self-esteem, demonstrating enthusiasm
23.	Low and Christopher (2000)	Communication, interpersonal skill, adaptability, flexibility, functional strengths

2.4.1 Communication Skill

One of the strong traits that differentiate a competent project manager from others is their ability to communicate with team members at different levels. This simply implies that the most vital skills required by a competent project manager are definitely the communication skills. Communication is the act of transmitting information from one person to another person so that the messages or information can be received in the way it was intended (Kelvin-Iloafu, 2016). To be more precise, some examples of communication skills include active listening, negotiation, persuasion, public speaking, verbal communication, written communication, and interviewing. All these communication skills and effective leadership usually go hand-in-hand. In practice, project management tends to involve leading teams from various departments that are unfamiliar with working together. Each of the project team members has different skills and might be expected to bring something unique to the table. Thus, the project manager act as the role of the communicator need to provide clear instructions and expectations to the entire team in order to increase the work productivity and efficiency. Not only that, but the project manager also needs to establish a project environment in which all the team members can be honest and open in their communication with each other, understand each other's communication style, and be able to communicate effectively with project stakeholders (Mehta, 2012). At the same time, it is also a must for a competent project manager to have a strong ability to listen, persuade, and understand what others mean by their behaviour (Zakaria et al., 2015). With strong communication skills, this can allow the project manager to interact with team members more effortlessly, in the event of any problems arising on the projects that can be handled efficiently (Mehta, 2012).

When project managers are constantly communicating with the team members, and stakeholders, it can actually ensure all parties stay aligned to the objectives of the project (Zulch, 2014). Project managers should keep in mind that communication is only effective if all the project team members understand everything. This is where the 7 C's of communication which includes clear, concise, concrete, correct, coherent, complete, and courteous may empower project managers in delivering the message clearly (Zani, Ali, and Samanol, 2011). Conversely, poor communication between the project manager and team

members will have a direct impact on the project's success (Harrington, Voehl, and Wiggin, 2012). Most of the team members struggled to complete their tasks because the project manager failed to communicate what they needed to do, why they should do it, how they should do it, and when they had to do it. With that being said, project managers should have effective communication skills in order to guarantee information flows at the right time, to the right person, and through the right channel.

On top of that, a competent project manager must master all forms of communication skills including written, verbal, and listening abilities (Zulch, 2014). This is because the project manager serves as the primary point of communication between team members and senior management. In other words, project managers have to communicate up, down, and across the organization. By way of example, a project manager will need to liaise with a wide range of people, starting from entry-level employees to heads of departments as well as CEOs. Not only that, but a project manager also has to use a different medium such as emails, phone calls, text messages, social media, presentations, and meetings in order to communicate with different levels of personnel. Moreover, it is also a must for a project manager to establish a trusting relationship with team members so that they feel more comfortable and relaxed while sharing relevant information about the project (Buvik and Tvedt, 2017). To keep the channels of communication always remain open, a project manager will need to make himself available and accessible to the team members at all times (Galli, 2020). Having said that, the project manager can adopt an open-door policy or have constant meetings from time to time. It is also critical for a project manager to let all team members know that they matter by maintaining body language such as eye contact, smiling, and listening attentively. In short, a competent project manager will acknowledge when to adapt their communication style to fit the needs of the project. The more proficient a project manager at strong communication, the more likely the project team is to accomplish tasks on schedule, achieve success, and meet the company's overall vision and goals (Galli, 2020).

2.4.2 Problem Solving and Decision-Making Skill

Problem-solving is another essential skill typically required for a competent project manager (Tahir, 2020). It is an inescapable truth that project managers in managerial positions will be tasked with identifying and resolving problems on a daily basis. This required exceptional attention to detail as well as the ability to remain calm under work pressure. A competent project manager should have the ability to tackle and solve frequent problems that tend to arise in the project (Giri, 2019). Great project managers must plan ahead of time and expect risks, then brainstorms and determine the best solutions within the shortest period. In the context of project management, problem-solving normally involves identifying a specific problem and then determining the best strategy to tackle the problem by adopting the best possible solutions (Kim et al., 2018). It is the capability to solve the issues even when circumstances are not favorable. When it is noticeable that a project manager has excellent problem-solving skills, the project manager can set himself apart from the rest of the managers as well as leaders.

Furthermore, another vital skill required by a project manager is decision-making skill. To be more exact, both the problem-solving skill and decision-making skill are interrelated. Project managers usually have to make numerous important decisions throughout the entire project life cycle (Tsiga and Emes, 2022). Whether knowingly or unknowingly, making the right decisions is a critical component of a project manager's success. Making the right decisions can lead to project success while making terrible decisions can lead to project failure (Fazaila Shad, Mehnaz Gul, and Muhammad Zahid, 2019). With that being said, clear and correct decisions must be made in order to ensure the organization operates smoothly and successfully. Not only that, but decision-making skills also allow a project manager to identify opportunities and threats so that an appropriate course of action can be taken to tackle them efficiently. A project manager must be accountable for all decisions they make and prepared to accept the responsibility for the outcomes of those decisions (Tsiga and Emes, 2022). In short, a competent manager has to possess excellent decision-making skills, as it often impacts organizational success.

2.4.3 Team-Building Skill

A competent project manager should have the ability to keep the entire project team intact. The main purpose of team building is to build a good working relationship with employees at all levels (Masanja and Chambi, 2020). In other words, a project manager should make connections with team members in order to develop credibility and foster camaraderie. The success of a project manager depends much on the performance of the team members. With that being said, great project managers should invest time to establish good working relationships with the team members. In addition, it is also vital for the project manager to create trust among team members (Krot and Lewicka, 2012). When project team members do not trust one another, they will waste a huge amount of time politicking. Conversely, team members that trust each other are more likely to perform more efficiently and effectively. Not only that, but they may also achieve amazing outcomes compared to team members that do not trust each other.

To build trust and good working relationships among team members more systematically, project managers should have strong team-building skills (Fung and Cheng, 2015). Before assembling a high-performance team, the project manager must first get to know each of the team members. Once project managers understand what motivates them and have a better understanding of their strengths and weaknesses, they can reduce micromanagement and delegate tasks more productively. This will also make it easier for the project manager to get to the root of any issues that arise, thereby eliminating any friction before it causes serious project delays. One of the best ways to achieve all of these is through conducting team-building activities (Obiekwe, Mobolade, Akinade, 2021). This simply means that a project manager can develop the project team members through interesting team-building activities. By way of example, a project manager can organize some outdoor activities that can foster team members' relationships. Some of the outdoor team-building activities such as obstacle course, jungle trekking, river trekking, flying fox, abseiling, paintball, campfire, and survival cooking can be held from time to time. These team-building activities are fun, and it can be effective ways to improve teamwork among team members, as well as identify team members' strengths and weaknesses.

In short, excellent team-building skills can be a critical determinant of any project's success. A well-trained team-builder is always the backbone of every successful project. With that being said, project managers with team-building skills are surely able to foster creativity, trust and cultivate a desire among team members to work toward common goals.

2.4.4 Conflict Resolution Skill

Conflict can arise from disagreements in perception, opinion, or belief among team members (Prieto-Remón et al., 2015). Usually, conflict is unavoidable in projects and organizations. To be more exact, most of the project managers tend to spend at least 20% of their time dealing with conflicts (Sudhakar, 2015). The likelihood of conflict in development projects is generally high because it involves personnel from different backgrounds and perspectives working together to complete the projects. Proper conflict resolution skills may help project managers successfully handle and settle conflicts, resulting in a more productive organization as a whole (Gupta, Boyd, and Kuzmits, 2011). With that being said, understanding the causes of conflicts is critical to the project manager's ability to deal with those conflicts more effectively. When conflict becomes dysfunctional, it frequently leads to bad project decision making, significant delays over issues, and disruption of the team's activities (Mitkus and Mitkus, 2014). All these definitely will harm the project's performance. On the other hand, conflict can be very helpful to the project when the project manager is able to turn those negative impacts into fresh knowledge and better team engagement which can boost the competitive spirit. To cut a long story short, a competent project manager should have conflict resolution skills to resolve conflict and thus, enhance overall project performance (Tabassi, Abdullah, and Bryde, 2018).

As previously mentioned, all workplaces tend to experience conflict. This is where a competent project manager should recognize conflict and deal with it swiftly. To achieve this, project managers must understand the interaction of the organizational and behavioral elements in order to create an environment that can motivate the team's demands. By doing so, the project manager is able to decrease unproductive conflict in the organization. Not only that, but a competent project manager with conflict resolution skills will have

the ability to effectively communicate with team members at all levels regarding both project objectives and important decisions (Mitkus and Mitkus, 2014). Project status review meetings, which are held on a regular basis can be a useful communication tool for the project manager to reduce conflicts in the long run (Mnkandla, 2013). Additionally, effective project planning and contingency planning also can assist a project manager in eliminating or minimizing conflict before it impedes project performance.

Those conflicts that happened in projects can be further subdivided into two different categories (Appelbaum et al., 1999). These two categories of conflicts are cognitive conflicts and affective conflicts. Cognitive conflicts are task-oriented and deal with discrepancies in decision-making. Another phrase that has a similar meaning to cognitive conflicts is substantive conflicts. Meanwhile, affective conflicts emphasize on differences in team members and their personalities rather than on the issue itself. By the same token, Armstrong and Lorentzen (1982) classified conflicts into vertical conflicts and horizontal conflicts. Vertical conflicts are those conflicts that tend to occur between superiors and subordinates, whereas horizontal conflicts occur mainly between project team members at the same level of hierarchy.

Despite the types of conflicts, there are five (5) conflict resolution techniques that the project manager should master in order to resolve conflicts more efficiently (Sudhakar, 2015). The first technique would be withdrawal or avoidance. It involves the action of ignoring, giving up, pulling out, or retreating from conflicts as much as possible. This method is suitable during the “cooling off’ period. To be more precise, the project manager can adopt this technique to acquire a better understanding of the conflict scenario, as well as when either party involved in the conflict is aggressive and uncooperative. Withdrawal is a passive and impermanent approach to solve conflicts (Sudhakar, 2015). Therefore, a competent project manager should not adopt this technique if the conflict involves issues that are urgent or critical to the project’s success. On top of that, the second technique is smoothing and accommodating (Thakore, 2013). This technique involves highlighting areas of conflict while ignoring matters of disagreement. The main purpose of this technique is to keep the team members at peace and prevent conflicting circumstances (Sudhakar, 2015). Not only that, but this smoothing technique is very beneficial when the conflict

arises is more vital than the viewpoints of the team members involved in the conflict (Thakore, 2013). However, one of the disadvantages of this technique is it only able to keep peace for a short period. That being stated, it is not a permanent long-term solution to solve any conflicts that arose throughout the project life cycle.

Apart from that, the third conflict resolution technique is compromise. Project managers who adopt this technique will need to bargain and implement tradeoff negotiations to search for solutions that satisfy both parties involved in the conflict (Sudhakar, 2015). In this technique, both parties might feel disappointed for a short period of time since they have to give up something essential to them. In the end, neither party wins, yet both gain desired results from the conflict. The drawback of this technique is that certain crucial aspects of the project might be sacrificed to satisfy both parties' personal goals. Furthermore, the fourth conflict resolution technique that should be mastered by the project manager is collaboration (Overton and Lowry, 2013). This technique is suitable to be adopted when the project situation is not suitable to be sacrificed. Collaborating is a powerful technique that involves incorporating numerous ideas and viewpoints from team members with different perspectives (Overton and Lowry, 2013). It normally provides a good opportunity for both parties to learn from one another. The active collaboration of both parties in contributing to the resolution makes it simpler for the project manager to obtain their consensus. However, this technique is not very effective when there are more than two parties involved in the conflict and their point of view are mutually incompatible.

The fifth conflict resolution technique that should be mastered by a competent project manager is confrontation (Thakore, 2013). This technique is appropriate to adopt in the project when both parties regard conflict as a problem and they are eager to look for a mutually acceptable solution. However, this conflict resolution technique necessitates a give-and-take mentality between both parties. In other words, both parties must be proactive and cooperative in solving the conflict. With that being said, a project manager should lead both parties to identify the root causes of the conflict by defining the conflict, acquiring essential information, proposing several solutions, and selecting the best solutions according to the conflict scenario. Although confrontation may

take a longer time to solve the conflict compared to other techniques, it is the only technique that delivers final solutions by ultimately resolving the underlying conflict (Thakore, 2013).

In short, these are five (5) conflict resolution techniques that should be mastered by a competent project manager. The value of the conflict created is actually determined by the project manager's ability to foster constructive conflict while reducing its potential harmful implications. If the project manager does not manage the conflicts effectively, it will further lead to mistrust, frustration, cynicism, apathy, hostile relationships, anxiety, and poor project performance (Sudhakar, 2015). A project manager with conflict resolution skills is undoubtedly able to identify when will the conflict be desirable to the project, what type of conflict would be beneficial to the project, and how much conflict is healthy for the project environment.

2.4.5 Planning Skill

Despite the fact that the world has advanced rapidly, the root causes of many project failures remain the same, namely inadequate planning and skill of a project manager (Irfan et al., 2021). Therefore, it becomes very important even in the modern world to review and evaluate the reasons why planning skills may help a project manager become more competent, as well as enhance the probability of project success. In the context of project management, a project is only considered successful when the actual performance fulfills the requirements of the planned performance. To be more precise, a successful project means that it must be completed within the stipulated time frame and stay within the preliminary budget. Jorgensen and Isaksson (2008) found out that many projects in different countries were over-budgeted and delayed mainly due to lack of proper planning. This includes projects such as Boston's Big Dig Project which has a 275% cost overrun and Denver's International Airport Project which also has a 200% over budget. With that being said, a competent project manager that wishes to end projects without exceeding predetermined time and cost will need to have reliable planning skills.

The term "planning" can be defined as the act of monitoring, directing, communicating, and coordinating among the project stakeholders (Laufer and Tucker, 1987). Not only that, but planning can also be described as the process

of identifying and refining project objectives, as well as the selection of the best approaches to achieve these objectives (Project Management Institute, 2017). One of the main reasons that project managers require reliable planning skills is because it allows them to develop project guidelines with sufficient detail. By doing so, project managers are able to notify other team members regarding the essential work packages that have to be executed and when the work must be accomplished in the correct manner (Hamzeh, Zankoul, and Rouhana, 2015). Meanwhile, project managers with planning skills are also able to keep an eye on the overall work progress and maintain a record of the project for future reference. Another important purpose of project planning is to make sure that all the internal project stakeholders involved in the project are aware of the activities and components of the project, as well as time, cost, and quality considerations (Irfan et al., 2021). Without good planning skills, all the greatest ideas from the project manager also cannot be brought to reality.

Other than that, a competent project manager should understand that planning does not end in the pre-construction phase. They will need to keep revising and developing project plans until the project is fully completed. Therefore, competent project managers can rely heavily on Gantt Charts to keep track of all the project progress without any hassle. Not only that, but experienced project managers can also utilize their past experiences to help understand current and future trends of the project. By doing so, the project manager is able to identify those deliverables and decisions that might have a greater impact on the project. In short, having reliable planning skills will greatly benefit the project manager in achieving the project goals and generating favorable results.

2.4.6 Negotiation Skill

Negotiation is the skill that is able to bring a conflict to a mutual agreement in order to reach a win-win situation (Trivellas and Drimoussis, 2013). A competent project manager is not necessary to accept every requisition. That being said, a competent project manager will need to have negotiation skills along with refusal skills. Negotiation not only refers to cost bargaining but also applies to operational negotiation (Peterson et al., 1995). To be more precise, negotiation is an interactive process that optimizes team members' efficacy in

achieving better outcomes. The negotiation normally has three different models which include win-win, win-lose, and lose-lose. As the name implies, the term "win-win" refers to the fact that the situation benefits both parties. Meanwhile, the term "win-lose" relates to one party benefits from the situation while the opposing party is disappointed with the outcomes. The term "lose-lose" simply refers to neither party benefiting from the outcome. Throughout negotiations, the win-win model is always prioritized in most situations. Thus, a competent project manager should have the ability to utilize negotiation skills to bring the conflict to a mutual agreement.

2.4.7 Collaboration

Collaboration can be defined as the individual's ability to contribute effectively to a group or project (Scoular et al., 2020). This normally entails perseverance, contributing to team knowledge, recognizing the efforts of others, and handling disputes. Not only that, but effective collaboration also involves a division of work among participants who are engaged in active interaction that culminates in a compilation of their efforts. In other words, collaboration can be known as a process of teamwork (Andrews and Rapp, 2015). Besides that, the collaboration skill is able to bring team members closer together and is essential for cross-learning. Cross-learning amongst team members tends to open up the possibility of acquiring new knowledge. Therefore, a competent project manager should equip himself with collaboration skills in order to lead all the team members to gain knowledge from the projects. Scoular et al. (2020) emphasize the significance of teamwork, which includes:

i. Increase demand to work well with others and to work globally.
ii. Allow effective working in groups.
iii. Develop cognitive and problem-solving abilities.
iv. Manage tasks more effectively.
v. Build healthy relationships and work closely together.
vi. Establish open communication.

2.4.8 Emotional Intelligence

According to Obradovic et al. (2013), there is a strong correlation between project management and emotional intelligence. The term "emotional intelligence" can be defined as an individual ability to perceive, feel, and cope with emotions (Hess and Bacigalupo, 2013). Another definition for emotional intelligence as stated in the journal by Casper (2002) indicates that emotional intelligence is the capability to recognize, comprehend, control, and utilize the power of emotions as the greatest source of energy, inspiration, connection, and influence. Research had shown that project managers who achieve and maintain high levels of Emotional Intelligence Quotient (EQ) tend to have a greater probability of team success. This is mostly due to the fact that an emotionally intelligent project manager will be able to establish the ideal work environment in which workplace conflict is kept to minimum (Khatib, Almteiri, and Qasemi, 2021). Not only that, but suggestions are welcomed and implemented when deemed beneficial and useful. As a result, it has the potential to drive the entire team to maximize their outputs. There is another article released by the Project Management Institute (2017) that also goes to the extent of classifying Emotional Intelligence as more significant than Intelligence Quotient for the project manager role for a variety of reasons. One of the key reasons is that a project manager with low Emotional Intelligence tends to perform badly in the management job because of the behaviors that impede project development and success, such as insulting and being sarcastic to other team members (Maqbool et al., 2017). This will also cause entire team members to become less productive, impeding the project's progress even further.

Having said that, a project manager with low Emotional Intelligence would not always be able to develop healthy and harmonious work relationships (Maqbool et al., 2017). Meanwhile, project managers with high Emotional Intelligence tend to demonstrate behaviors that can speed up project completion and effectively utilize relationships with coworkers and stakeholders to keep team members highly engaged throughout the duration of the project (Montenegro et al., 2021). At the end of the day, this type of project manager will be able to generate high-quality deliverable on-time and within budget without having to dip into a highly stressful working environment and deplete all project resources.

2.5 Strategies to Improve Leadership Skills for Project Managers

Leadership skills tend to play a very vital role in a project manager's career development. To become a competent project manager, each project manager will need to equip themselves with numerous leadership skills described in the previous subsections. This includes leadership skills such as communication skills, problem-solving skills, decision-making skills, team-building skills, conflict resolution skills, planning skills, negotiation skills, collaboration, and emotional intelligence. It is an undeniable fact that effective leadership skills do not appear overnight. Developing leadership skills requires continuous and collective effort from the project manager itself. With that being said, project managers should consistently challenge themselves to enhance their leadership capabilities. To cut a long story short, the strategies to improve the leadership skills of project managers will be discussed in a detailed manner in the following subsections.

Table 2.4: Summary of Studied Strategies.

Item	Author	Studied Strategies
1.	Coers et al., (2021)	Mentoring
2.	Manzoor, Wei, and Asif (2021)	Reward
3.	Kjellström, Stålne and Törnblom (2020)	Training
4.	Crisp and Young (2018)	Mentoring
5.	Khan, Waqas, and Muneer (2017)	Reward
6.	Moore and Wang (2017)	Mentoring
7.	Obicci (2015)	Reward
8.	Van Dijk and Schodl (2015)	Performance Appraisal
9.	Al Yahya and Mat (2013)	Training
10.	Tuytens and Devos (2012)	Performance Appraisal
11.	Luthans (2000)	Reward

2.5.1 Mentoring Programme

A mentoring program is a process in which an experienced, well-respected, and compassionate mentor leads another individual in their personal and professional growth (Guhan et al., 2020). In an organizational context, mentoring is frequently considered as a training and development (T&D) program that may use to strengthen a group or an individual's potential to perform certain roles and responsibilities (Abdullah, Ismail, and Francis, 2009). Not only that, but a mentoring program also can assist a professional individual in becoming acquainted with new skills or talents. However, mentoring models normally vary according to the organizational context and there is always no best model that can meet the demands of all organizations (Ismail et al., 2019).

To be more precise, there is either a formal or informal mentoring program that can be implemented to help project managers to improve their leadership skills (Abdullah, Ismail, and Francis, 2009). A formal mentoring program is often viewed as the structured and supervised interaction between mentor and mentee. In fact, the mentor should be someone who is more skilled, educated, qualified, knowledgeable, and experienced person as compared to the mentee. With that being said, the mentor definitely will serve as a role model and counsellor in order to increase the project manager's leadership skills (Crisp and Young, 2018). Conversely, informal mentoring programs are often viewed as the process and systems of interaction between mentors and mentees to meet certain goals (Abdullah, Ismail, and Francis, 2009).

On top of that, Zhang et al., (2019) even highlighted that a one-to-one mentoring program can boost project managers' self-confidence and self-efficacy. This is mainly due to the importance of the mentor's role in both professional counseling knowledge and mentor support. In addition, Arora and Rangnekar (2014) discovered that psychosocial mentoring is significantly more helpful than career guidance in areas that are critical to career resilience. If mentoring programs are properly managed and conducted, they can definitely help the project manager to improve their leadership skills in the long run (Coers et al., 2021).

2.5.2 Training

Most of the competent project managers are not born with leadership skills. Nevertheless, these leadership skills can be developed through educational training and self-learning. In other words, leadership skills might be difficult to acquire but they can be learned and cultivated through proper training (Kjellström, Stålne and Törnblom, 2020). Nowadays, the awareness of investment in proper training to improve project managers' performance has increased drastically (Imran, 2013). This is mainly due to the fact that project managers are the most important members of any kind of project. Not only that, but the performance of the project manager has a direct effect on the growth and success of the organization.

Having said that, every organization should conduct a thorough Training Needs Analysis (TNA). The Training Need Analysis (TNA) is the most powerful technique which allows organizations to identify training and development required by the project manager in order for them to perform better (Anderson, 1994). By conducting the Training Need Analysis (TNA), it also allows the project managers to completely identify their weaknesses and types of leadership skills required by them. As previously mentioned, self-learning is another excellent option for project managers to develop their leadership skills. However, self-learning needs tremendous self-discipline and self-awareness from the project manager itself. By doing so, the project manager was also able to identify his leadership weakness and worked on it. Last but not least, tailored, and suitable training could also improve the effectiveness of the training (Al Yahya and Mat, 2013).

2.5.3 Performance Appraisal

Performance appraisal can be defined as the methods and processes adopted by the organization to assess the level of performance of its personnel and to offer them feedback (Van Dijk and Schodl, 2015). In other words, an appraisal is a type of measurement to evaluate performance of the project manager. Since most leadership skills are intangible, thus they are difficult to measure through performance appraisal (Tuytens and Devos, 2012). However, it is still possible to understand the performance of the project manager through certain performance measurement techniques. This simply implies that evaluation is

vital since reviewing the performance of project managers allow them to make further improvement. One of the most effective performance measurement techniques is the Key Performance Indicator (KPI). The Key Performance Indicator is a very common performance measurement technique adopted by employers in Malaysia. This is mainly due to the fact that this technique is extremely good at transforming intangible into measurable data. Moreover, it is an undeniable fact that performance measurement is important to the majority of the project managers, especially those working in the construction industry (Lee, Syuhaida Ismail, and Mohammad Hussaini, 2013). To effectively evaluate the leadership skills required by a project manager, progress and performance of the project can be leveraged as a guideline.

2.5.4 Rewards

It is widely assumed that the motivation of project managers is critical to increase their performance and effectiveness (Manzoor, Wei, and Asif, 2021). Every employee enjoys receiving rewards, and project managers are no exception. In other words, there is no doubt that rewards are able to bring motivation to the project managers. To be more precise, reward can be known as a token of appreciation. In fact, rewards can be given to project managers in terms of monetary or recognition in order to encourage them to exercise their leadership skills.

According to Khan, Waqas, and Muneer (2017), there are two main types of rewards which include intrinsic reward and extrinsic reward. From their findings, it clearly showed that there is a substantial correlation between project managers' performance and reward. Another finding from Obicci (2015) indicates that both extrinsic and intrinsic rewards are conducive to encourage project managers to practice their leadership skills. To be more specific, extrinsic rewards are sometimes referred to as concrete rewards. Some examples of extrinsic rewards include bonuses, perks, salary raises, and promotions (Khan, Waqas, and Muneer, 2017). Although extrinsic rewards might not satisfy all project managers, it is still a wonderful motivation for the project manager to develop their leadership skills on a regular basis. On the other hand, intrinsic rewards are non-physical rewards and are often known as psychological rewards (Khan, Waqas, and Muneer, 2017). Despite the existence of extrinsic rewards,

Luthans (2000) strongly argues that intrinsic rewards such as recognition are sometimes more effective and efficient as compared to extrinsic rewards. From the study, it clearly stated that recognition should be given immediately and personally whenever the project manager manages to exercise leadership skills in their projects. To cut a long story short, both extrinsic and intrinsic rewards may help project managers to improve their leadership skills.

2.6 Chapter Summary

Based on the literature reviews concerning the research objectives, this chapter has presented a detailed literature study on the essential leadership skills for project managers in Malaysia. To be more precise, this literature review has sailed firstly through the main differences between managerial skills and leadership skills. In today's complex and volatile working environment, most of the organization undoubtedly require the support of both effective leaders and managers (Liphadzi, Aigbavboa, and Thwala, 2015). An individual can always choose to be a successful leader, a successful manager, or even both of them at the same time. However, both of these positions demand familiarity with slightly different sets of abilities and skills. Thus, the leadership skills required by the project managers to manage their projects more effectively and efficiently are also presented in this literature review. It was clear from these previous studies that there are various leadership skills that should be adopted by the project managers. The leadership profile of the project managers tends to have a direct effect on the success or failure of the project under their management. Not only that, but the strategies to improve leadership skills for project managers were also elaborated in this literature review. In short, a competent project manager should have several adequate leadership skills instead of only technical knowledge to create or remain a competitive advantage in the market.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter revealed the methodology to conduct the research. A research methodology is a specific procedure or technique that is used to classify, collect, and analyse information about a topic. The carefully structured and monitored research allows researchers to evaluate different hypotheses and methods, discuss concepts to find out the most accurate solutions to solve particular problems. Research is necessary to ensure that the study can be carried out more effectively. By doing research, the truth that is concealed or which has not been discovered yet will be revealed.

In Chapter 3, it is divided into five sections. Section 3.2 summarizes the research design adopted. The research instrument adopted in this research is clearly explained in Section 3.3 while the sampling method for this research is covered in Section 3.4. Meanwhile, the sampling size of this research is covered in Section 3.5 while the data analysis method for this research is covered in Section 3.6. Lastly, Section 3.7 ends this chapter with a brief summary for Chapter 3 along with the tabulation of the analysis method adopted in this research.

3.2 Research Design

This research is an exploratory research. The objective of exploratory research is to explore the main differences between managerial skills and leadership skills. Not only that, but this research also aims to examine the leadership skills required for project managers to manage their projects in an effective and efficient manner. Meanwhile, another intention of this research is to investigate the strategies to improve leadership skills for project managers in Malaysia. An exploratory research is also used to study a problem, issue, or phenomenon that has not been clearly defined yet. This method is suitable to apply when the research topic has not been explored by the public and there is limited information available out there.

There are two types of methodological choices which include "qualitative research" and "quantitative research" (Daniel, 2016). Qualitative research is used to provide a comprehensive and detailed description of the research topic (Elkatawneh, 2016). The results are usually in the form of words and graphics. An open-ended questionnaire and interview are examples of qualitative research. However, quantitative research puts more focus on counting and classifying features. The results are in the form of numerical or statistics (Elkatawneh, 2016). Examples of quantitative research include an online survey, online polls, telephone interviews, and so on.

The methodological choice for this research study is quantitative. Quantitative research is adopted in this research to generate numerical data and transform the collected data into useful statistics. The quantitative data collection method is more structured compared to the qualitative data collection method. Besides that, the sample size in quantitative research is also large enough to provide more accurate data.

A survey questionnaire is utilized to gather responses from a large sampling group. All the respondents will fill in the same set of questionnaires through Google Forms. The reason for using the questionnaire is to collect respondents' opinions related to essential leadership skills for project managers in Malaysia.

3.3 Research Instrument

In order to achieve the aim and three (3) objectives of this research, the survey questionnaires in the form of Google Forms are adopted to collect opinions, thoughts, and suggestions from the respondents. Survey questionnaires are the most common methods applied to collect data in the research studies. The survey questionnaires are selected as the research instrument because it is cheap and affordable (Nayak and Narayan, 2019). Besides that, questionnaires do not have any time constraints. This means that respondents are able to take their time to answer the questionnaire. Another advantage of using questionnaire is that it is convenient to gather information from a large sampling group. Since the survey questionnaire for this research is in the form of Google Forms, the questionnaire can be easily distributed to respondents by just sending them a link to the survey page.

Even though there are plenty of benefits using the survey questionnaire, there are also some limitations when dealing with it. First of all, low response rate is the major drawback when using the survey questionnaire to collect data (Rice et al., 2017). Online respondents tend to quit in the middle of the survey if they find out that the survey questionnaire is too lengthy and boring. Besides that, the dishonesty of respondents is also one of the disadvantages of using the survey questionnaire. As we know, the survey questionnaire relies heavily on the honesty of the respondents. If the respondents are unable to provide honest answers and opinions during the survey, it will eventually lead to inaccuracy of the survey results.

3.3.1 Questionnaire Survey Design

The questionnaire of this research consists of five (5) sections which are Section A, Section B, Section C, Section D, and Section E. Each of the sections contains several multiple-choice questions. The scale of the measurement adopted in the research is the Five-point Likert Scale: "1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree". However, the Five-point Likert Scale is only applied in Section C and Section D. This means that Section C and Section D are closed-ended questions while Section A and Section B open-ended questions. The survey design of this questionnaire is shown in Table 3.1.

Table 3.1 :Questionnaire Design.

Section	Description
A	Respondent's background
B	Identify the main differences between managerial skills and leadership skills.
C	Examine the leadership skills required for project managers to manage their project more effectively and efficiently.
D	Investigate the strategies to improve leadership skills for project managers.

Table 3.1 above showed the design of the survey questionnaire. This questionnaire design is consistent with the objectives of this research which emphasis in Chapter 1.5. Section A is the introductory part of the survey

questionnaire. The purpose and instructions to answer the questionnaire are clearly stated in this section. Besides that, Section A is also the introductory part for the respondents. Respondents are required to fill in their name, age, sex, companies' name, nature of the companies, companies' size, respondents' years of working experience and et cetera. That being said, respondents are required to choose from the most suitable among the selection.

Meanwhile, Section B is examining respondents' knowledge level on the main differences between managerial skills and leadership skills. All of the questions in this section are close-ended questions. Respondents are asked to figure out the main differences between a leader and a manager as emphasis to the first objective.

Section C consists of the matrix questions to determine the leadership skills required for project managers to manage their projects in an effective and efficient manner. Respondents are requested to rate a few leadership skills from the scale of strongly disagree to strongly agree using the Five-point Likert Scale. All of the data collected in this section is to determine the most important leadership skills required by a competent project manager. The same goes for Section D, it consists of several matrix questions to determine the most relevant strategies to improve leadership skills for project managers. Respondents are required to rate a few strategies from the scale of strongly disagree to strongly agree.

3.4 Sampling Method and Population

Target population is the priority step of this research. This is mainly due to the reason that there will be only a small number of people elected to represent the entire industry. To be more precise, the sampling method refers to the method of selecting a person from the population who needs to be sampled. In this research, the target population would be set at around 300.

All in all, there are two types of sampling methods in quantitative research which include probability sampling and non-probability sampling. The differences between probability and non-probability sampling refer to the degree of participation of the respondents. In other terms, probability sampling simply means that every individual has an equivalent opportunity of participating in the survey. Meanwhile, non-probability sampling only refers to

targeted respondents with relevant expertise to participate in the survey. Some examples of non-probability sampling methods include quota sampling, snowball sampling, judgement sampling, and convenience sampling (Taherdoost, 2017).

To sum up, the non-probability sampling method is adopted in this research. This research study required different respondents formed from differences industries of project managers whose involve in Malaysia's project. That being said, the sampling frame was based on the research objectives and thus all of them must be project managers from different industry in Malaysia. On top of that, only participants with experiences on project management will be selected to answer the survey questionnaire. To be more precise, this research exerts snowball sampling technique in order to penetrate into multiple industry. Snowball sampling is a non-probability sampling method where initial study subjects help to recruit other participants who meet eligibility criteria and could potentially contribute to this study through their acquaintances. Consideration of the sampling method is essential as the accuracy of data is significant to the research. Although the non-probability method is adopted in this research, not all sampling methods are appropriate to be used. That being said, the description of each sampling method is shown in Table 3.2.

Table 3.2 :Adoption of Non-Probability Sampling Method.

Non-probability Sampling Method	Adoption	Remark
Convenience This is a straightforward method of data collection. All the questionnaires are distributed among the familiar setting.	✓	Adopted because it is expected the questionnaire will be distributed throughout an organization.
Quota This is a non-random sampling method in which the respondent is chosen based on their predetermined trait. As a result, a similar group of respondents is widely dispersed.	×	Not adopted mainly due to similar group of respondents unable to represent the population.
Snowball Numbers of respondents will grow significantly as long as the existing respondents are recruiting other respondents.	✓	Adopted because it can deliver the benefit of collecting more responses from various organization.
Purposive This sampling method aims to obtain comprehensive information on a phenomenon, rather than for statistical purposes.	×	Not adopted because respondents from different backgrounds are required to participate in the questionnaire.
Voluntary response Since all respondents are willing to take part in the questionnaire, it might have hidden potential hazards. Not only that, but the data	×	Not adopted mainly due to the concern about the accuracy of collected data.

received was unable to represent the population mainly due to the strong prejudice on opinion.	

3.5 Sampling Size

The right sample size is an important factor to acquire accurate results for any research. To be more precise, the sample size for the research should not be either too large or too small as both have drawbacks. The determination of sample size depends on the purpose of the research, population size, and et cetera.

In this research, the sampling size is calculated according to the formula 3.1. The desired confidence level is assumed at 95%, where the Z score is 1.96. The marginal error is assumed at 5%, where e= 0.05. However, we assumed that the population proportion percentage is 50%. This means that p is 0.50. The population of target respondents in this research is estimated at around 300. According to formula 3.1, the sample size is around 156. Therefore, there will be at least 130 respondents will be selected to complete the survey.

$$n = \frac{\frac{z^2 * p(1-p)}{e^2}}{1+(\frac{z^2 * p(1-p)}{e^2 N})} \quad (3.1)$$

$$n = \frac{\frac{1.96^2 * 0.50(1-0.50)}{0.05^2}}{1+\left(\frac{1.96^2 * 0.50(1-0.50)}{0.05^2 300}\right)} = 156$$

where n = sampling size

Z = desired level of confidence (assumed is 95%, 1.96)

P = population proportion percentage (assumed is 50%)

e = margin of error (assumed is 5%)

N = population

3.6 Data Analysis

All the data collected was evaluated by statistical method using Microsoft Office Excel and Statistical Package for the Social Sciences (SPSS) software where appropriate. To be more precise, SPSS software is window-based software. This software is selected as the data analysis software as it is able to process a huge number of data especially the data obtained from the survey questionnaire. Another reason for choosing this software is it able to carry out data entry work, analysis works, and presents through visual presentations such as tables and graphs. In this research, there are a few types of data analysis carried out through the SPSS software. This includes descriptive analysis, reliability analysis, Kruskal Wallis Test, and Spearman's Rank Correlation Test.

3.6.1 Descriptive Analysis

Description analysis is applied in this research for the classification and analysis of the data collected. The visual illustrations such as pie charts and bar charts are used in description analysis to express the data. The purpose of the description analysis is to analyse the personal information of respondents. Personal information such as name, age, sex, companies name, nature of the companies, companies' size, respondents' years of working experience and et cetera will be presented in a systematic format. Another advantage of using the bar chart and pie chart is to make the analysis work more convenient and easier to understand. Basically, description analysis is applied in Section A of the survey questionnaire to measure the average and frequency distribution of respondents' data.

3.6.1.1 Relative Important Index (RII) Analysis

Relative Important Index Analysis is used in this quantitative research to rank the severity of the data collected. This simply means that the data collected by Five-point Likert's scale questionnaire were transformed into an important index. Thus, three of the research objectives would be rank through Relative Important Index Analysis. The closer the variables are to the value of 5, the more important the variables are.

Throughout this analysis, the mean and standard deviation (SV) will be included to determine the main differences between leadership skills and

managerial skills. Not only that, but it will also determine important leadership skills required by project managers as well as the key strategies to improve leadership skills. SV refers to the difference between each individual and mean score. The range of standard deviation start from zero to infinity. Unlike important index (I.I), the closer of SV value to 0, the more consistent the result obtained from the respondent. That being said, the ranking of all variables will be identified by the reading of important index.

3.6.2 Reliability Analysis

Once the description analysis has been conducted, it is the right timing to pursue for data accuracy. Reliability analysis is applied in this research to measure the level of acceptance for all the data collected in Section B, Section C and Section D of the survey questionnaire. This analysis is useful when analysing the data for matrix questions such as questions in Section B, Section C and Section D. Cronbach's Alpha Test and Kruskal Wallis Test is used in the reliability test to analyse data in SPSS Software.

3.6.2.1 Cronbach's Alpha Test

Cronbach's alpha test is applied in the reliability test to measure the scale of the internal consistency reliability of the variable. This test is normally used when the questions in the questionnaire are Likert Scale questions. Besides that, the alpha-coefficient value for Cronbach's Alpha Test lies between 0 and 1. When the alpha-coefficient value lies between 0.7 and 0.8, it means that the internal consistency is acceptable. However, if the alpha-coefficient value lies below 0.5, it indicates that the internal consistency is unacceptable. Table 3.3 shows the rules for the Cronbach's Alpha Test Coefficient Range.

Table 3.3 :Rules for Cronbach's Alpha Test Coefficient Range.

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

3.6.2.2 Kruskal Wallis Test

Kruskal Wallis test is adopted to determine the statistically significant difference between the medians of respondent's designation group along with various independent variables in this study. That being said, the main purpose of this test is to determine the significant difference of the required leadership skills from the questionnaire. In the validation statistics, the Asymptotic Significance (p-value) is an important identification reference. The significance level is 0.05, indicating a 5% risk of reaching a difference without an actual difference. While p-value ≤ 0.05, which carries the meaning that the difference between medians is statistically significant. Whereas the p-value > 0.05, the difference between medians was not statistically significant. Therefore, there are two hypotheses proposed for this research. The null hypothesis H_0 is formulated with no significant perception difference, whereas the second hypothesis H_1 is formulated for a significant perception difference.

3.6.2.3 Spearman's Rank Correlation Test

Spearman's Rank Correlation Test is a test that normally adopted to measure the bonding between two ranked variables. The primary purpose of this test is to obtain better understanding of the relationship between leadership skills required by the project managers and the strategies to improve leadership skills. That being said, the analysis for determining the relationship between these two ranked variables will be carried out. On top of that, the value of Spearman's rank correlation test ranges from +1.0 to -1.0. This simply means that the correlation values of the test would not exceed 1.0 or be less than -1.0. To be

more precise, a correlation value of 1.0 indicates a perfect positive correlation while a correlation of -1.0 indicates a perfect negative correlation.

3.7 Summary

This chapter mainly introduces the questionnaire design, sampling method, sample size, and analysis method. The questionnaire to be designed with a 5-point Likert scale and distributed by a non-probability sampling method. The target sample size received to this research is a 5% margin of error with estimated 135 respondents. Furthermore, the results will be analysed and evaluated using SPSS for descriptive and reliability statistics. Last but not least, the data analysis method adopted for this research is tabulated in Table 3.4.

Table 3.4: Tabulation of Analysis Method.

Questionnaire's Section	Descriptive Analysis	Reliability Analysis
Section A		
Demographic	Frequency analysis Crosstab	Not applicable
Section B		
Identify the main differences between managerial skills and leadership skills	Relative importance index (RII) analysis	Cronbach's Alpha Test, Kruskal Wallis Test
Section C		
Examine leadership skills required for project managers	Relative importance index (RII) analysis	Cronbach's Alpha Test, Kruskal Wallis Test
Section D		
Investigate strategies to improve leadership skills	Relative importance index (RII) analysis	Cronbach's Alpha Test, Kruskal Wallis Test, Spearman's Rank Correlation Test

CHAPTER 4

RESULTS AND DISCUSSIONS

4.1 Introduction

Chapter 4 of this research highlights the results obtained from the field survey and discussion of the findings. It starts with an overview respondents' demographic background. Next, the collected data are analysed through Cronbach's Alpha Coefficient Test to examine the reliability of the results. Subsequently, the Relative Importance Index analysis is carried out to rank the data relative importance. Not only that, but the Kruskal-Wallis Test and Spearman's Correlation Test are also adopted in this research. Lastly, the summaries of findings are illustrated to provide a concise and comprehensive conclusion of the results for the study.

A total of 350 sets of survey questionnaires in Google Forms format were distributed through email, WhatsApp, and LinkedIn. To be more precise, this questionnaire has been completed by project managers in Malaysia as the only targeted respondent group for this study. The response rate of the data collected is 39.43% which is equivalent to 138 sets of the survey questionnaire. All these collected data will be analysed according to the section in the questionnaire. For ease of reference, the questionnaire code is applied in each section for analysis purposes.

4.2 Respondent Background

All of the respondents' attributes in terms of gender, age group, academic qualification, industry sector, designation, years of working experience, and value of the single largest project of respondents are summarized in Table 4.1 below. As shown in Table 4.1, most of the respondents from the survey questionnaire are male. Of the 138 respondents, 92 (66.70%) of the respondents were male while a total of 46 (33.30%) of respondents were female. Besides that, the findings show that the biggest group of respondents which occupies 96 (69.60%) of the number of the respondents are between the ages of 21 to 30 years old. This indicated that the majority of the respondents who participated in the survey belonged to young adults. The second biggest group of respondents occupy 34 (24.60%) of the total number of respondents and belongs to the age group of 31 to 40 years old. The smallest group of respondents which occupies only 8 (5.8%) respondents belong to the age group of 41 to 50 years old.

On the other hand, Table 4.1 also indicates the highest academic qualification of the respondents. According to Table 4.1, it clearly shows that 74.6% of the respondents have Bachelor's degree as their highest academic qualification. The second largest group with 10.9% of the total respondents has the Malaysian Certificate of Education (equivalent to Sijil Pelajaran Malaysia) as their highest academic qualification. Meanwhile, there are 9.4% of the total respondents have a Diploma or Sijil Tinggi Pelajaran Malaysia (equivalent to Cambridge GCE Advanced-Level) as their highest academic qualification. The remaining 4.3% of the total respondents have earned Master's Degree as their highest academic qualification, followed by 0.7% of the total respondent has possessed Doctor of Philosophy as their highest academic qualification. Thus, this indicated that the majority of the representatives of the company were Degree's holders.

Besides that, the finding shows that the majority of the respondents that completed the survey questionnaire were professionals in the construction industry (80.40%). The second highest group of respondent belongs to the advertising and marketing industry (7.20%), followed by the computer and technology industry (3.60%), education industry (2.20%), manufacturing industry (2.20%) and health care industry (0.70%). The remaining 5 (3.60%)

respondents are from industries that were not included in the survey questionnaire.

As for the designation of respondents in their organization, Table 4.1 indicates that the majority of the respondents belong to the junior-level project manager category accounting for 54.30% of the total respondents. The second biggest group occupying 32.60% belongs to the senior-level project managers. Meanwhile, the third largest group of respondents with 11.60% comes from managerial level project managers. The remaining minority 1.40% of the respondents come from the executive level project managers. Therefore, this simply indicates that the majority of the respondents who participated in the study were junior-level project managers. The population of the respondent is acceptable as there is certain designation is rather a small group in the actual working industry.

In addition, the years of working experience in the context of project management for all respondents are shown in Table 4.1. Respondents with less than 5 years of working experience form the largest percentage, which is 57.40%. This is followed by 29.40% of the respondents who have 6 years to 10 years of working experience. The third largest group at 11.00% of the respondents has 11 years to 15 years of working experience. There are only 2.2% of the respondents have 16 years to 20 years of working experience in the context of project management. From the data collected, it can be concluded that the majority of the respondents had less than 5 years of working experience. Although experienced professionals are able to deliver more precise and reliable data, perceptions from the less-experienced professionals also play an important role in providing opinions on this study.

Last but not least, Table 4.1 below also indicates the value of the single largest project that the respondents had been involved. Table 4.1 clearly shows that the largest group of respondents with 39.90% have the single largest value of project experience of not exceeding RM 200,000.00. The second largest group at 28.30% of the total respondents has been involved with value of the single largest project of exceeding RM 5 million. The third largest group of respondents with 14.50% of respondents has single largest value of project experience of not exceeding RM 1 million. This is followed by 12.30% of the total respondents that have single largest value of project experience of not

exceeding RM 500,000.00. The only remaining 5.10% of the total respondents have single largest value of project experience of not exceeding RM 3 million.

Table 4.1: Attributes of Respondents (N=138).

General Information	**Categories**	**Frequency**	**Percentage**
Gender	Male	92	66.70%
	Female	46	33.30%
Age Group	21-30	96	69.60%
	31-40	34	24.60%
	41-50	8	5.80%
	51-60	0	0.00%
	60 and above	0	0.00%
Academic Qualification	High School	15	10.90%
	Diploma	13	9.40%
	Bachelor's Degree	103	74.60%
	Master's Degree	6	4.30%
	Doctor of Philosophy	1	0.70%
Industry Sector	Construction	111	80.40%
	Advertising and Marketing	10	7.20%
	Computer and Technology	5	3.65%
	Education	3	2.20%
	Manufacturing	3	2.20%
	Health Care	1	0.70%
	Others	5	3.65%
Designation	Junior Level	75	54.30%
	Senior Level	45	32.60%
	Managerial Level	16	11.60%
	Executive Level	2	1.40%
	Director/Top Management	0	0.00%
Working Experience	Less than 5 years	78	57.40%

	6 to 10 years	40	29.40%
	11 to 15 years	15	11.00%
	16 to 20 years	3	2.20%
	More than 20 years	0	0.00%
Value of Single Largest Project	Not exceeding RM 200,000.00	55	39.90%
	Not exceeding RM 500,000.00	17	12.30%
	Not exceeding RM 1 million	20	14.50%
	Not exceeding RM 3 million	7	5.10%
	Exceeding RM 5 million	39	28.30%

4.2.1 Designation versus Nature of Business

The relationship between respondents' designation and respondents' nature of business is tabulated in Table 4.2 below. As shown in Table 4.2, the majority of the respondents who are junior-level project manager belongs to construction sector professionals, which consists of 45.65% of the total respondents. There are also 34 (24.63%) respondents who are senior-level project manager belongs to construction sector professionals, followed by 12 (8.69%) respondents who are managerial-level project managers that belong to construction sector professionals. Meanwhile, there is just 1 (0.72%) respondent each from the health care industry who is a junior, senior, and managerial level project manager.

Table 4.2: Section A- Designation versus Nature of Business.

Designation	**Nature of Business**							**Total**	
	Construction	Advertising and marketing	Computer and technology	Education	Manufacturing	Health care	Others	Frequency	Percentage
Junior Level	63	6	0	2	1	0	3	75	54.35%
Senior Level	34	4	3	1	1	1	1	45	32.61%
Managerial Level	12	0	2	0	1	0	1	16	11.59%
Executive Level	2	0	0	0	0	0	0	2	1.45%
Director/Top Management	0	0	0	0	0	0	0	0	0.00%
Total	111	10	5	3	3	1	5	138	100.00%

4.2.2 Designation versus Age Group

Table 4.3 indicates the relationship between respondents' designation and respondents' age group. Respondents that are junior-level project manager which belong to the age group of 21 to 30 years old form the largest category, which is 68 (49.27%) respondents in total. However, some respondents who are senior-level project managers also belong to the age group of 21 to 30 years old. The third highest group of respondents are senior-level project managers which belong to the age group of 31 to 40 years old, which consists of 16 (11.59%) respondents in total. From the data collected, it clearly shows that there are no respondents who are project managers from any of the designations belonging to the age group of 51 years old and above.

Table 4.3: Section A- Designation versus Age Group.

Designation	**Age Group**					**Total**	
	21-30 years old	31-40 years old	41-50 years old	51-60 years old	60 years old and above	Frequency	Percentage
Junior Level	68	6	1	0	0	75	54.35%
Senior Level	28	16	1	0	0	45	32.61%
Managerial Level	0	12	4	0	0	16	11.59%
Executive Level	0	0	2	0	0	2	1.45%
Director/Top Management	0	0	0	0	0	0	0.00%
Total	96	34	8	0	0	138	100.00%

4.2.3 Designation versus Years of Working Experience

The relationship between respondents' designation and years of working experience of the respondents in the context of project management is indicated in Table 4.4 below. As shown in Table 4.4, the majority of the respondents who are junior-level project manager has less than 5 years of working experience, which consists of 47.10% of the total respondents. Meanwhile, there are 27 (19.56%) respondents who are senior-level project manager has 6 to 10 years of working experience. This is followed by 11 (7.97%) respondents who are managerial level project managers with 11 to 15 years of working experience. Based on the data collected, there are no respondents with more than 20 years of working experience in the context of project management.

Table 4.4: Section A- Designation versus Years of Working Experience.

Designation	**Years of Working Experience**					**Total**	
	Less than 5 years	6 to 10 years	11 to 15 years	16 to 20 years	More than 20 years	Frequency	Percentage
Junior Level	65	8	2	0	0	75	54.35%
Senior Level	15	27	2	1	0	45	32.61%
Managerial Level	0	5	11	0	0	16	11.59%
Executive Level	0	0	0	2	0	2	1.45%
Director/Top Management	0	0	0	0	0	0	0.00%
Total	80	40	15	3	0	138	100.00%

4.2.4 Designation versus Highest Academic Qualification

Table 4.5 indicates the relationship between respondents' designation and respondents' highest academic qualification. Respondents that are junior -level project managers who had earned Bachelor's Degree formed the largest category, which comprises 60 (43.47%) respondents in total. There are also 33 (23.91%) respondents who are senior level project manager had earned their Bachelor's Degree. Meanwhile, there are 7 (5.07%) respondents had started their working careers as junior-level project managers once they graduated from high school. This is followed by 7 (5.07%) respondents who are junior-level project managers that have Diploma certification. From the data collected, there is only 1 (0.72%) respondent had earned Doctor of Philosophy as their highest academic qualification.

Table 4.5: Section A- Designation versus Highest Academic Qualification.

Designation	**Highest Academic Qualification**					**Total**	
	High School (SPM)	Diploma	Bachelor's Degree	Master's Degree	Doctor of Philosophy	Frequency	Percentage
Junior Level	7	7	60	1	0	75	54.35%
Senior Level	6	5	33	1	0	45	32.61%
Managerial Level	2	1	10	3	0	16	11.59%
Executive Level	0	0	0	1	1	2	1.45%
Director/Top Management	0	0	0	0	0	0	0.00%
Total	15	13	103	6	1	138	100.00%

4.3 Section B- Main differences between managerial skills and leadership skills

The first objective of this research is to identify the main differences between managerial skills and leadership skills. There are a total of ten (10) differences as listed with the questionnaire codes in Table 4.6.

Table 4.6: Section B- Questionnaire Code.

Code	Description
B.01	Leader normally focuses on doing the right things while manager focuses on doing the things right.
B.02	Leader focuses on delivering the project more effectively while a manager focuses on delivering the project more efficiently.
B.03	Leader emphasized on what has to be done but manager emphasized on how things are done.
B.04	Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done.
B.05	Leader often serves subordinate while managers typically serve superordinate.
B.06	Leader focuses more on communication, motivation, and predetermined goals whilst manager is concerned with organizational structure and system.
B.07	Leader is responsible to negotiate for resources while the manager had to ensure all the available resources are well organized and placed at the right place at the right time.
B.08	Leader has followers while manager has subordinates.
B.09	Leader is more concerned about people while manager is concerned more about work.
B.10	Leader is classified as risk-seeking while manager is described as risk-averse.

4.3.1 Cronbach's Alpha Reliability Test

As shown in Table 4.7, the Cronbach's Alpha Reliability Test had been conducted t measure the internal consistency of the collected data. However, the results are only acceptable if the Cronbach's Alpha value is more than or equal to 0.700. The higher the Cronbach's Alpha value obtained from the reliability test, the higher the reliability of sampling from the respondents.

After the Cronbach's Alpha Reliability Test is completed, it shows that the variable "Main differences between managerial skills and leadership skills" has the Cronbach's coefficient alpha value of 0.864 which is ranged between $0.8 \leq \alpha < 0.9$, indicating that the internal consistency is within the good range. In this case, this reliability assessment showed that the data collected for this section had good internal consistency and were highly reliable.

Table 4.7: Section B- Cronbach's Alpha Test.

Cronbach's Alpha	Number of Items	Performance
0.864	10	Good

4.3.2 Arithmetic Mean Test and RII Analysis

A total of 10 (ten) main differences between managerial skills and leadership skills were studied in this research. Table 4.8 below illustrates the results of the Relative Important Index Analysis along with the mean value among all the variables. All of the variables in this section are ranked according to the RII value and mean calculated. From the result above, the mean rank represents the level of agreement from that the respondents have with a particular statement. This simply means that the higher the score of the RII value and mean rank, the higher the level of agreement of the respondents with the main differences listed in the survey questionnaire.

According to the data tabulated in Table 4.8, all of the mean values are lies above 3.000. The highest mean ranking is "Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done" or "B.04" with a mean value of 4.0797 among ten main differences. This clearly represented that majority of the respondents who are project managers agreed that leaders frequently demand

change and present unique ideas throughout the project, whereas managers tend to urge stability in order to accomplish their project as soon as possible.

Besides that, the second highest mean ranking is “Leader is classified as risk-seeking while manager is described as risk-averse” or “B.10” with a mean value of 4.0725. As most of the respondents for this survey questionnaire are from the construction industry, it is normal and expected that the construction project managers are more risk averse. This is mainly due to the fact that most of the construction project managers tend to have proper planning in order to reduce and minimize the risks that might occur throughout the project. It is very vital that the construction project manager is able to not only complete the construction project on time but also to bargain contact to the optimal rate. When it comes to selecting a project manager, risk averse project managers are always the client’s first choice

On top of that, the third-ranked main differences shown in the table is “B.09” or “Leader is more concerned about people while manager is concerned more about work”. The reason for this is because a project manager is obviously expected to focus more on project time, cost and quality in order to achieve the expectations and aspirations of all stakeholders, including the satisfaction of consumers for the end product. In other terms, most of the project managers only work with well-defined tasks, timelines, budgets, and scope. They also tend to work according to black-and-white. Thus, the majority of the project managers were continually focused on the bottom line, pushing deadlines and the practical applications needed to complete a project. Meanwhile, project leader tends to have more focus on the people rather than on more technical aspects of the project. Instead of clearly defined deliverables and work schedules, the project leader will devote more time dealing with the intangible aspects that hold a team together.

The fourth-ranked main difference is “B.01” or “Leader normally focuses on doing the right things while manager focuses on doing the things right”. Since both of the “B.09” and “B.01” shared very close mean values of 4.0290 and 4.0217. This indicates that the majority of the respondents still agree with the statement presented by the code “B.09” and “B.01”.

Apart from that, the ninth-ranked main difference is “Leader focuses more on communication, motivation, and predetermined goals whilst manager

is concerned with organizational structure and system" or "B.06" with a mean score of only 3.9348. Based on the mean test scoring, it indicates that the majority of the respondents do not agree with the statement that leaders only focus on communication, motivation, and predetermined goals. This is expected in these modern worlds as project managers are normally expected to play several roles in a particular project. For example, a project manager sometimes is also required to act as a leader in order to communicate and motivate all the team members. These respondents were adamant that leaders would need to prioritise organizational structure and system over predetermined goals.

The last ranked main difference which is "Leader focuses on delivering the project more effectively while a manager focuses on delivering the project more efficiently" or "B.02" had the lowest mean value of 3.8406. The "B.02" was ranked last on the mean ranking test mainly because most of the projects, particularly fast-paced construction projects or mega construction projects required competent project managers who could strategize ahead of time. This is to ensure the entire project is able to complete according to the predetermined period, cost, and quality. That being said, it is a must for project managers to work efficiently and effectively at the same time in the real-world working industry

4.3.3 Kruskal-Wallis Test

Kruskal-Wallis Test is adopted in this study for determining the statistically significant differences among the five designation groups in order to identify the main differences between managerial skills and leadership skills. The two hypotheses tested by Kruskal-Wallis Test are as follows:

- Null hypothesis (H_0): There were no significant differences between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.
- Substitution hypothesis H_1: There were significant differences between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.

The alpha value adopted for this research study is 0.05 with a freedom degree of two (2) for five (5) groups of respondents. When the asymptotic significance value is less than or equal to 0.05, the null hypothesis (H_0) is rejected, which supports a 95% confidence level of substitution. All five (5) different groups of respondents will be tested through this test to identify the significant differences. Meanwhile, the critical Chi-square value will be computed through the p-value and degree of freedom.

The result of the Kruskal Wallis Test for Section B is summarized in Table 4.9. According to Table 4.9, there is only one asymptotic significant value that is smaller than 0.05. To be more precise, the Kruskal Wallis H Test showed that “Leader emphasized on what has to be done but manager emphasized on how things are done” has significant perception difference between the project managers from different designations. Thus, the “leader emphasized on what has to be done but manager emphasized on how things are done” or “B.03” failed on the null hypothesis (H_0).

Other than “B.03”, the Kruskal-Wallis H Test showed that there is no other significant perception difference between the median of self-evaluation by project managers from different designations. That being said, all the main differences except “B.03” fail on Substitution hypothesis H_1. Since there is no other significant difference, it indicates that the main differences between managerial skills and leadership skills are generally equal.

Table 4.8: Section B- Arithmetic Mean Test, RII Analysis and Kruskal Wallis Test.

Code	Arithmetic Mean Test and RII Analysis				Kruskal Wallis Test	
	Mean	Std. Deviation	RII	Rank	Chi-square	Asymp. Sig.
B.01	4.0217	1.38008	0.804	4	1.335	0.721
B.02	3.8406	0.97596	0.768	10	2.897	0.408
B.03	3.9783	1.19285	0.795	7	9.081	**0.028***
B.04	4.0797	1.10778	**0.815**	**1**	2.311	0.510
B.05	4.0000	1.08069	0.800	6	3.437	0.329
B.06	3.9348	1.18511	0.786	9	2.332	0.506
B.07	3.9420	1.13837	0.788	8	3.474	0.324
B.08	4.0072	1.09742	0.801	5	7.756	0.051
B.09	4.0290	1.13948	0.805	3	3.658	0.301
B.10	4.0725	1.19389	0.814	2	3.770	0.287

Note: * indicates there is a significant perception difference on the level of 0.050.

Table 4.9: Hypothesis Result of Kruskal Wallis Test for Section B.

	Hypothesis	
Code	H_0 ($p>0.05$) [No significant perception difference]	H_1: ($p\leq0.05$) [Significant perception difference]
B.01	Leader normally focuses on doing the right things while manager focuses on doing the things right.	Rejected
B.02	Leader focuses on delivering the project more effectively while a manager focuses on delivering the project more efficiently.	Rejected

B.03	Rejected	Leader emphasized on what has to be done but manager emphasized on how things are done.
B.04	Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done.	Rejected
B.05	Leader often serves subordinates while managers typically serve superordinate.	Rejected
B.06	Leader focuses more on communication, motivation, and predetermined goals whilst manager is concerned with organizational structure and system.	Rejected
B.07	Leader is responsible to negotiate for resources while the manager had to ensure all the available resources are well organized and placed at the right place at the right time.	Rejected
B.08	Leader has followers while manager has subordinates.	Rejected
B.09	Leader is more concerned about people while manager is concerned more about work.	Rejected
B.10	Leader is classified as risk-seeking while manager is described as risk-averse.	Rejected

4.3.3.1 Influences with Different Relationship

To further understand the influences between variables in Section B and other variables in the survey questionnaire, various relationships are studied and tabulated as follows. According to Table 4.10, it shows the relationship between all variables in Section B and the types of industry sector. Based on the data collected, project managers from the construction industry have the perception of "Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done" or "B.04" are the most significant differences with a mean value of 4.160. This clearly indicated that the majority of the project managers from the construction industry agreed that leaders usually push for changes and introduce unique concepts while managers will only complete the project according to the plan.

Meanwhile, the "Leader normally focuses on doing the right things while manager focuses on doing the things right" or "B.01" scored the highest mean score for project managers from the advertising and marketing industry with a mean value of 4.100. In other words, the "B.01" is ranked number one with a Relative Important Index value of 0.8100 among the project managers from advertising and marketing industry. Not only that, the "B.01" also scored the highest mean score with a mean value of 4.000 for project managers from the computer and technology industry. At the same time, the "Leader is more concerned about people while manager is concerned more about work" or "B.09" that has a mean value of 4.000 also ranked first for the project managers from the computer and technology industry.

Apart from that, the "B.01" also has the highest mean value for project managers from the education and manufacturing industry. Both of this industry have a mean value of 5.000 and Relative Important Index of 1.000. That being said, these project managers strongly agreed that leader normally focuses on doing the right things while managers focus on doing the things right. The "Leader has followers while manager has subordinates" or "B.08" has the highest mean value of 5.000 for the project managers from health care industry.

Last but not least, the relationship between all variables in Section B and the designation of respondents are studied and tabulated in Table 4.11. According to the data shown in Table 4.11, the "B.01", "B.04" and "B.05" have the highest mean value of 4.120 for junior level project managers. To be more

precise, three of these variables have the highest Relative Important Index of 0.8240 among the junior level project managers. Other than that, the “B.03” has the highest mean value of 4.270 and Relative Important Index of 0.8533 for senior level project managers. This simply means that most of the senior level project managers agreed that leaders tend to focus on what needed to be completed while the manager focuses on how things were completed. The “B.09” has the highest mean value of 4.060 and Relative Important Index of 0.8125 for managerial level project managers. Out of ten (10) variables in Section B, six of the variables which include “B.03”, “B.04”, “B.06”, “B.08”, “B.09” and “B.10” have the highest mean value of 5.000 and Relative Important Index of 1.000 for project managers from the executive level.

Relationship between Type of Industry Sector

Table 4.10: Section B- Relationship between Type of Industry Sector.

Code	Construction				Advertising and Marketing				Computer and Technology				Education				Manufacturing				Health Care				Others			
	N= 111				N= 10				N= 5				N= 3				N= 3				N= 1				N= 5			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
B.01	4.010	1.385	0.8018	8	4.100	1.449	**0.8200**	**1**	4.000	1.225	**0.8000**	**1**	5.000	0.000	**1.0000**	**1**	5.000	0.000	**1.0000**	**1**	4.000	-	0.8000	2	3.000	1.871	0.6000	4
B.02	3.910	0.940	0.7820	9	3.700	0.949	0.7400	4	3.800	0.837	0.7600	2	4.330	0.577	0.8667	3	4.000	0.000	0.8000	2	3.000	-	0.6000	3	2.400	1.517	0.4800	6
B.03	4.060	1.138	0.8126	5	4.000	1.333	0.8000	2	3.400	1.517	0.6800	4	4.670	0.577	0.9333	2	3.670	1.528	0.7333	3	4.000	-	0.8000	2	2.400	1.140	0.4800	6
B.04	4.160	1.014	**0.8324**	**1**	4.000	1.247	0.8000	2	3.800	1.643	0.7600	2	4.330	1.155	0.8667	3	3.670	2.309	0.7333	3	4.000	-	0.8000	2	2.800	1.304	0.5600	5
B.05	4.080	1.001	0.8162	3	4.000	1.333	0.8000	2	3.600	1.673	0.7200	3	4.330	1.155	0.8667	3	3.330	2.082	0.6667	4	3.000	-	0.6000	3	3.000	0.707	0.6000	4
B.06	4.030	1.171	0.8054	7	3.700	1.418	0.7400	4	3.600	1.140	0.7200	3	3.330	1.155	0.8000	4	3.670	0.577	0.7333	3	4.000	-	0.8000	2	3.200	1.483	0.6400	3
B.07	4.040	1.144	0.8072	6	3.400	1.174	0.6800	6	3.800	0.837	0.7600	2	3.330	0.577	0.6667	5	3.670	1.155	0.7333	3	4.000	-	0.8000	2	3.600	1.517	0.7200	2
B.08	4.080	1.097	0.8162	3	3.500	1.434	0.7000	5	3.600	0.894	0.7200	3	4.000	1.000	0.8000	4	3.670	0.577	0.7333	3	5.000	-	**1.0000**	**1**	3.800	0.837	**0.7600**	**1**
B.09	4.070	1.142	0.8144	4	3.800	1.619	0.7600	3	4.000	1.000	**0.8000**	**1**	4.330	0.577	0.8667	3	3.670	1.155	0.7333	3	4.000	-	0.8000	2	3.600	0.548	0.7200	2
B.10	4.140	1.164	0.8270	2	3.800	1.476	0.7600	3	3.800	1.095	0.7600	2	4.670	0.577	0.9333	2	3.670	0.577	0.7333	3	3.000	-	0.6000	3	3.600	1.949	0.7200	2

Relationship between Designation of Respondents

Table 4.11: Section B- Relationship between Designation of Respondents.

Code	Junior Level				Senior Level				Managerial Level				Executive Level				Director/Top Management			
	N= 75				N= 45				N= 16				N= 2				N= 0			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
B.01	4.12	1.355	**0.8240**	**1**	3.890	1.369	0.7778	8	4.000	1.549	0.8000	2	3.500	2.121	0.7000	3	-	-	-	-
B.02	3.75	1.054	0.7493	7	4.000	0.826	0.8000	6	3.750	1.000	0.7500	4	4.500	0.707	0.9000	2	-	-	-	-
B.03	3.92	1.217	0.7840	4	4.270	0.986	**0.8533**	**1**	3.310	1.401	0.6625	7	5.000	0.000	**1.0000**	**1**	-	-	-	-
B.04	4.12	1.052	**0.8240**	**1**	4.110	1.005	0.8222	5	3.690	1.580	0.7375	5	5.000	0.000	**1.0000**	**1**	-	-	-	-
B.05	4.12	1.039	**0.8240**	**1**	3.910	1.062	0.7822	7	3.630	1.310	0.7250	6	4.500	0.707	0.9000	2	-	-	-	-
B.06	3.91	1.187	0.7813	5	3.910	1.276	0.7822	7	4.000	0.966	0.8000	2	5.000	0.000	**1.0000**	**1**	-	-	-	-
B.07	3.93	1.201	0.7867	3	4.040	1.127	0.8089	6	3.630	0.885	0.7250	6	4.500	0.707	0.9000	2	-	-	-	-
B.08	3.87	1.107	0.7733	6	4.220	1.166	0.8444	3	3.940	0.772	0.7875	3	5.000	0.000	**1.0000**	**1**	-	-	-	-
B.09	3.91	1.199	0.7813	5	4.180	1.072	0.8356	4	4.060	1.063	**0.8125**	**1**	5.000	0.000	**1.0000**	**1**	-	-	-	-
B.10	3.96	1.224	0.7920	2	4.240	1.090	0.8489	2	4.000	1.366	0.8000	2	5.000	0.000	**1.0000**	**1**	-	-	-	-

4.4 Section C- Leadership Skills Required for Project Managers

The second objective of this research is to examine the leadership skills required for project managers to manage their projects in an effective and efficient manner. There is a total of nine (9) leadership skills as listed with the questionnaire codes in Table 4.12 for easier tabulation.

Table 4.12: Section C- Questionnaire Code.

Code	Description
C.01	Communication skill
C.02	Problem solving skill
C.03	Decision making skill
C.04	Team building skill
C.05	Conflict resolution skill
C.06	Planning skill
C.07	Negotiation skill
C.08	Collaboration skill
C.09	Emotional Intelligence

4.4.1 Cronbach's Alpha Test

The Cronbach's Alpha Reliability Test also had been conducted to measure the internal consistency reliability of the collected data for the Section C survey questionnaire. According to Table 4.13, it shows that variable "Leadership skills required for project manager to manage their project in an effective and efficient manner" has the Cronbach's coefficient alpha value of 0.822 which is ranged between $0.8 \leq \alpha < 0.9$, indicating that the internal consistency is within the good range. That being said, the variables for this section are all reliable and viable for the current research.

Table 4.13: Section C- Cronbach's Alpha Test.

Cronbach's Alpha	Number of Items	Performance
0.822	9	Good

4.4.2 Arithmetic Mean Test and RII Analysis

A total of nine (9) leadership skills that are required for project managers to manage their projects in an effective and efficient manner were studied in this research. Table 4.14 below illustrates the results of Relative Important Index Analysis along with the mean value among all the variables. All of the variables in this section are ranked according to the RII value and mean calculated. From the result above, the mean rank represents the level of importance from that the respondents have with particular leadership skills. This simply indicates that the higher the score of the RII value and mean rank, the higher the level of importance with the leadership skills listed in the survey questionnaire.

According to the data tabulated in Table 4.14, all of the mean values are lies above 3.000. The highest mean ranking is "Decision-making skill" or "C.03" with a mean value of 4.180 among nine (9) leadership skills. This clearly represented that majority of the respondents who are project managers agreed decision-making skill is very important in their workplace in order to accomplish their project more effectively and efficiently. This is mainly due to decision-making skill is one of the life skills that can help project managers to build confidence and manage their stress throughout the ongoing project (World Health Organization, 2003). Not only that, most of the respondents also agreed that project managers without excellent decision-making skills could not lead a team to move toward project goals.

Besides that, the second highest mean ranking is "Team building skill" or "C.04" with a mean value of 4.170. This simply means that most of the respondents agreed team building skill is one of the most important leadership skills required by a competent project manager. It is an undeniable fact that conflicts tend to happen in any kind of project. A competent project manager with team-building skills definitely able to reduce conflicts between the project team members (Wilemon and Thamhain, 1983). Not only that, project managers with this particular skill are also able to increase work efficiency and work productivity. A pilot study from Seetha (2014) showed that team building skill is ranked third as critical soft skills for project managers in the workplace. That being said, it can be justified that the importance of team- building skills has still remained crucial since the year of 2014.

Apart from that, the third-ranked leadership skill shown in Table 4.14 is "Communication skill" or "C.01" with a mean value of 4.120. As previously mentioned, most of the respondents for this survey questionnaire were project managers from the construction industry. Good communication skills are able to help project managers to build rapport while dealing with various stakeholders in the construction industry. A study by Robles (2012) showed that the mean value of communication skills from American corporate executives was 4.910, which indicates the importance of effective communication for professional workers in the United States. There is also another pilot study from Seetha (2014) indicated that communication skill was ranked highest among the six (6) leadership skills in the area of Klang Valley, Selangor, and Negeri Sembilan. Therefore, the "Communication skill" or "C.01" is deserved to be one of the top-ranking leadership skills in this research study.

4.4.3 Kruskal-Wallis Test

Kruskal-Wallis Test is adopted in this section for determining the statistically significant differences among the five designation groups in order to identify the leadership skills required for project managers. The two hypotheses tested by Kruskal-Wallis Test are as follows:

- Null hypothesis (H_0): There were no significant differences in between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.
- Substitution hypothesis H_1: There were significant differences in between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.

The alpha value adopted for this research study is 0.05 with a freedom degree of two (2) for five (5) groups of respondents. When the asymptotic significance value is less than or equal to 0.05, the null hypothesis (H_0) is rejected, which supports a 95% confidence level of substitution. All five (5) different groups of respondents will be tested through this test to identify the significant differences. Meanwhile, the critical Chi-square value will be computed through the p-value and degree of freedom.

The result of the Kruskal Wallis Test for Section C is summarized in Table 4.15. According to Table 4.15, there is no asymptotic significant value

that is smaller than 0.05. In other words, the Kruskal Wallis H Test showed that all the variables in Section C did not have significant perception differences between the project managers from different designations. Thus, all the variables in Section C passed the null hypothesis (H_0). Since there is no statistically significant difference between the five groups of respondents, it also indicates that the leadership skills required by project managers to manage their projects in an effective and efficient manner are generally equal.

Table 4.14: Section C- Arithmetic Mean Test, RII Analysis and Kruskal Wallis Test.

Code	**Arithmetic Mean Test and RII Analysis**				**Kruskal Wallis Test**	
	Mean	Std. Deviation	RII	Rank	Chi-square	Asymp. Sig.
C.01	4.120	1.304	0.8246	3	2.028	0.567
C.02	4.090	1.029	0.8174	5	2.291	0.514
C.03	4.180	1.048	**0.8362**	**1**	5.479	0.140
C.04	4.170	1.046	0.8348	2	5.675	0.129
C.05	4.110	1.030	0.8217	4	2.992	0.393
C.06	3.960	1.045	0.7913	7	2.310	0.511
C.07	3.810	1.111	0.7623	9	5.067	0.167
C.08	3.990	1.053	0.7971	6	6.102	0.107
C.09	3.910	1.356	0.7812	8	1.082	0.781

Table 4.15: Hypothesis Result of Kruskal Wallis Test for Section C.

Code	Hypothesis	
	H_0 (p>0.05) [No significant perception difference]	H_1: (p≤0.05) [Significant perception difference]
C.01	Communication skill	Rejected
C.02	Problem solving skill	Rejected
C.03	Decision making skill	Rejected
C.04	Team building skill	Rejected
C.05	Conflict resolution skill	Rejected
C.06	Planning skill	Rejected
C.07	Negotiation skill	Rejected
C.08	Collaboration skill	Rejected
C.09	Emotional Intelligence	Rejected

4.4.3.1 Influences with Different Relationship

To further understand the influences between variables in Section C and other variables in the survey questionnaire, various relationships are studied and tabulated as follows. According to Table 4.15, it shows the relationship between all variables in Section C and the types of industry sector. Based on the data collected, project managers from the construction industry have the perception of "Communication skill" or "C.04" is the most significant leadership skill required by a project manager with a mean value of 4.280 and Relative Important Index of 0.8559. This clearly indicated that the majority of the project managers from construction industry agreed that a competent project manager definitely required excellent team-building skills in order to improve the interpersonal relationship between team members. When all team members establish a close relationship with one another, they will be able to boost their productivity and thus increase the project outcomes.

Meanwhile, the "Communication skill" or "C.01" scored the highest mean score for project managers from advertising and marketing industry with a mean value of 4.500. To be more precise, the "C.01" is ranked first with a Relative Important Index value of 0.9000 among the project managers from advertising and marketing industry. Not only that, the "C.01" also scored the

highest mean score and Relative Important Index value for project managers from education industry, manufacturing industry, and health care industry. For project managers that belong to education industry, it has the highest mean value of 4.330 and Relative Important Index of 0.8667. As previously mentioned, it has the highest mean value of 5.000 and Relative Important Index of 1.0000 for project managers from the manufacturing industry and health care industry.

Apart from that, the "Problem-solving skill" or "C.02" has the highest mean value for project managers from computer and technology industry. This industry has a mean value of 4.000 and Relative Important Index of 0.800. That being said, project managers from computer and technology industry unanimously agreed that problem-solving skill is critical for ensuring the project fulfilled the success criteria. Not only that, the "C.05" and "C.06" also have the highest mean value of 4.000 and Relative Important Index of 0.800 for project managers from the computer and technology industry.

Furthermore, the "Emotional Intelligence" or "C.09" scored the highest mean score for project managers from both the manufacturing and health care industry with a mean value of 5.000. This simply indicates project managers from the manufacturing and health care industry agreed that emotional intelligence skills play an important role in their daily tasks. Out of nine (9) variables in Section C, five of the variables which include "C.02", "C.04", "C.05", "C.06", and "C.07" have the highest mean value of 4.800 and Relative Important Index of 0.9600 for project managers from other industry.

Last but not least, the relationship between all variables in Section C and the designation of respondents are studied and tabulated in Table 4.17. According to the data shown in Table 4.17, the "Team building skill" and "C.04" have the highest mean value of 4.270 for junior-level project managers. To be more precise, this variable also has the highest Relative Important Index of 0.8533 among the junior level project managers. Other than that, the "Decision-making skill" or "C.03" has the highest mean value of 4.360 and a Relative Important Index of 0.8711 for senior-level project managers. This is mainly due to the fact that most of the senior-level project managers will need to make important decisions throughout the project. Without excellent decision-making skills, project managers might make the wrong mistake that could lead to project failure. The "Communication skill" or "C.01" has the highest mean value of

4.440 and Relative Important Index of 0.8875 for managerial level project managers. Out of nine (9) leadership skills listed in Section C, five of the variables which include “C.01”, “C.03”, “C.04”, “C.05” and “C.09” have the highest mean value of 4.000 and a Relative Important Index of 0.800 for project managers from the executive level.

Relationship between Type of Industry Sector

Table 4.16: Section C- Relationship between Type of Industry Sector.

Code	Construction				Advertising and Marketing				Computer and Technology				Education				Manufacturing				Health Care				Others			
	N= 111				N= 10				N= 5				N= 3				N= 3				N= 1				N= 5			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
C.01	4.140	1.278	0.8288	4	4.500	1.080	**0.9000**	**1**	3.800	1.643	0.7600	2	4.330	1.155	**0.8667**	**1**	5.000	0.000	**1.0000**	**1**	5.000	-	**1.0000**	**1**	2.400	1.517	0.4800	5
C.02	4.030	1.057	0.8054	5	4.400	0.966	0.8800	2	4.000	1.225	**0.8000**	**1**	4.000	1.000	0.8000	2	4.330	0.577	0.8667	3	4.000	-	0.8000	2	4.800	0.447	**0.9600**	**1**
C.03	4.190	1.066	0.8378	3	4.400	0.966	0.8800	2	3.600	1.140	0.7200	3	3.670	1.528	0.7333	3	4.330	0.577	0.8667	3	3.000	-	0.6000	3	4.600	0.548	0.9200	2
C.04	4.280	0.992	**0.8559**	**1**	3.500	1.269	0.7000	6	3.400	1.517	0.6800	4	3.670	1.155	0.7333	3	3.670	0.577	0.7333	5	3.000	-	0.6000	3	4.800	0.447	**0.9600**	**1**
C.05	4.200	0.971	0.8396	2	3.500	1.269	0.7000	6	4.000	1.225	**0.8000**	**1**	3.330	1.528	0.6667	4	3.330	0.577	0.6667	6	2.000	-	0.4000	4	4.800	0.447	**0.9600**	**1**
C.06	3.950	1.056	0.7910	8	4.100	0.876	0.8200	3	4.000	1.225	**0.8000**	**1**	3.000	1.000	0.6000	5	3.670	0.577	0.7333	5	2.000	-	0.4000	4	4.800	0.447	**0.9600**	**1**
C.07	3.850	1.055	0.7694	9	3.700	1.337	0.7400	5	3.000	0.707	0.6000	6	3.000	2.000	0.6000	5	4.000	1.732	0.8000	4	2.000	-	0.4000	4	4.800	0.447	**0.9600**	**1**
C.08	4.020	1.053	0.8036	6	3.800	1.229	0.7600	4	3.200	0.837	0.6400	5	3.670	1.528	0.7333	3	4.670	0.577	0.9333	2	4.000	-	0.8000	2	4.200	0.837	0.8400	3
C.09	3.990	1.290	0.7982	7	3.500	1.650	0.7000	6	2.800	1.304	0.5600	7	3.670	2.309	0.7333	3	5.000	0.000	**1.0000**	**1**	5.000	-	**1.0000**	**1**	3.200	1.643	0.6400	4

Relationship between Designation of Respondents

Table 4.17: Section C- Relationship between Designation of Respondents.

Code	Junior Level				Senior Level				Managerial Level				Executive Level				Director/Top Management			
	N= 75				N= 45				N= 16				N= 2				N= 0			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
C.01	4.000	1.395	0.8000	6	4.220	1.185	0.8444	3	4.440	1.209	**0.8875**	**1**	4.000	1.414	**0.8000**	**1**	-	-	-	-
C.02	4.030	1.090	0.8053	5	4.200	0.968	0.8400	4	4.130	0.957	0.8250	2	3.500	0.707	0.7000	2	-	-	-	-
C.03	4.200	1.000	0.8400	3	4.360	0.981	**0.8711**	**1**	3.630	1.310	0.7250	6	4.000	1.414	**0.8000**	**1**	-	-	-	-
C.04	4.270	0.963	**0.8533**	**1**	4.240	1.069	0.8489	2	3.560	1.209	0.7125	7	4.000	1.414	**0.8000**	**1**	-	-	-	-
C.05	4.210	0.920	0.8427	2	4.090	1.125	0.8178	5	3.690	1.195	0.7375	5	4.000	1.414	**0.8000**	**1**	-	-	-	-
C.06	4.030	1.078	0.8053	5	3.960	0.952	0.7911	6	3.690	1.195	0.7375	5	3.500	0.707	0.7000	2	-	-	-	-
C.07	3.990	1.097	0.7973	7	3.620	1.093	0.7244	9	3.560	1.209	0.7125	7	3.500	0.707	0.7000	2	-	-	-	-
C.08	4.150	1.009	0.8293	4	3.820	1.093	0.7644	7	3.810	1.109	0.7625	4	3.000	0.000	0.6000	3	-	-	-	-
C.09	4.000	1.346	0.8000	6	3.730	1.405	0.7467	8	3.940	1.340	0.7875	3	4.000	1.414	**0.8000**	**1**	-	-	-	-

4.5 Section D- Strategies to Improve Leadership Skills for Project Manager

The third objective of this research is to identify the best strategies to improve the leadership skills required for project managers. There are a total of five (5) strategies to improve leadership skills as listed with the questionnaire codes in Table 4.18 for easier tabulation.

Table 4.18: Section D- Questionnaire Code.

Code	Description
D.01	Mentoring Programme
D.02	Training
D.03	Performance Appraisal
D.04	Intrinsic Reward
D.05	Extrinsic Reward

4.5.1 Cronbach's Alpha Test

The Cronbach's Alpha Reliability Test also had been conducted to measure the internal consistency reliability of the collected data for the Section D survey questionnaire. After the Cronbach's Alpha Reliability Test is completed, it shows that the variable "Strategies to improve leadership skills for project manager" has the Cronbach's coefficient alpha value of 0.779 which is ranged between $0.7 \leq \alpha < 0.8$, indicating that the internal consistency is within the acceptable range. In this case, this reliability assessment showed that the data collected for this section had good internal consistency and were highly reliable. Thus, this reliability assessment proved that the survey data collected for this section had good internal consistency and were highly reliable.

Table 4.19: Section D- Cronbach's Alpha Test.

Cronbach's Alpha	Number of Items	Performance
0.779	5	Acceptable

4.5.2 Arithmetic Mean Test and RII Analysis

There are a total of five (5) key strategies to improve leadership skills for project managers were studied in this research. Table 4.20 below illustrates the results of the Relative Important Index Analysis along with the mean value among all the five (5) variables. All of the variables in this section are ranked according to the RII value and mean calculated. From the result shown below, the mean rank represents the level of preference from the respondents have for particular strategies to improve leadership skills. This simply indicates that the higher the score of the RII value and mean rank, the higher the level of preference for the strategies listed in the survey questionnaire.

According to the data tabulated in Table 4.20, all of the mean values are lies above 3.000. The preference starting from the highest to the lowest is "D.05", "D.04", "D.01", "D.03", and "D.02" being the smallest degree of preference. To be more precise, the highest mean ranking is "Extrinsic Reward" or "D.05" with a mean value of 4.480 and Relative Important Index of 0.8957 among five (5) leadership skills. As discussed, extrinsic rewards are referred to gifts or monetary rewards. It can be concluded from Table 4.20 that extrinsic rewards are the most preferred strategy to improve project managers' leadership skills. This is mainly due to the fact that gifts and monetary rewards act as a motivation for project managers to practice their leadership skills.

Besides that, the second highest mean ranking is "Intrinsic Reward" or "D.04" with a mean value of 4.410 and a Relative Important Index of 0.8812. This simply means that most of the respondents agreed intrinsic reward is one of the most preferred strategies that can improve project manager's leadership skills. Unlike extrinsic rewards, intrinsic rewards normally refer to recognition among the project team members.

Apart from that, the third-ranked strategy to improve leadership skills for a competent project manager is the "Mentoring Programme" or "D.01" with a mean value of 4.080. Mentoring program normally refers to a top-down relationship. That being said, most of the junior-level project managers tend to accept senior-level project managers to guide them in the workplace. Bursh and Kelly (2014) even highlighted that junior-level project managers normally prefer an educational approach and higher-level project managers to lead them. Not only that, but this strategy is also very useful for certain types of industries

that require a certain level of mentoring and knowledge sharing. An empirical test from Arora and Rangnekar (2014) even showed that mentoring program is very useful when come to motivating and enhancing bonding among the project team members. Therefore, a mentoring program is still deserved to be the third-ranking strategy in this research study.

In addition, the fourth highest mean ranking is "Performance Appraisal" or "D.03" with a mean value of 3.810 and Relative Important Index of 0.7623. This simply means that performance appraisal has a higher acceptance level than training. Last but not least, "Training" or "D.02" is ranked last among five (5) of the strategies with a mean value of only 3.790. As discussed, training is a process of continuous learning. A study from Spar et al., (2018) indicates that most of the skill gaps are able to close out through learning and training. Not only that, but training is also a good platform to transfer tangible knowledge instead of intangible knowledge. However, this strategy is still the least preferable method among the respondent.

4.5.3 Kruskal-Wallis Test

Kruskal-Wallis Test is adopted in this section for determining the statistically significant differences among the five designation groups in order to identify the leadership skills required for project managers. The two hypotheses tested by Kruskal-Wallis Test are as follows:

- Null hypothesis (H_0): There were no significant differences in between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.
- Substitution hypothesis H_1: There were significant differences in between the five designation groups which include Junior Level, Senior Level, Managerial Level, Executive Level, and Director.

The alpha value adopted for this research study is 0.05 with a freedom degree of two (2) for five (5) groups of respondents. When the asymptotic significance value is less than or equal to 0.05, the null hypothesis (H_0) is rejected, which supports a 95% confidence level of substitution. All five (5) different groups of respondents will be tested through this test to identify the significant differences. Meanwhile, the critical Chi-square value will be computed through the p-value and degree of freedom.

The result of the Kruskal Wallis Test for Section D is summarized in Table 4.20. According to Table 4.20, there is no asymptotic significant value that is smaller than 0.05. In other words, the Kruskal Wallis H Test showed that all the variables in Section D did not have significant perception differences between the project managers from different designations. Thus, all the variables in Section D passed the null hypothesis (H_0). Since there is no statistically significant difference between the five groups of respondents, it also indicates that all the identified strategies to improve leadership skills for project managers are generally equal.

Table 4.20: Section D- RII Analysis and Kruskal Wallis Test.

	RII Analysis				**Kruskal Wallis Test**	
Code	Mean	Std. Deviation	RII	Rank	Chi-square	Asymp. Sig.
D.01	4.080	1.430	0.8159	3	1.848	0.605
D.02	3.790	1.090	0.7580	5	1.672	0.643
D.03	3.810	1.118	0.7623	4	1.208	0.751
D.04	4.410	0.860	0.8812	2	1.669	0.644
D.05	4.480	0.930	**0.8957**	**1**	2.519	0.540

Table 4.21: Hypothesis Result of Kruskal Wallis Test for Section D.

	Hypothesis	
Code	H_0 ($p>0.05$) [No significant perception difference]	H_1: ($p\leq0.05$) [Significant perception difference]
D.01	Mentoring Programme	Rejected
D.02	Training	Rejected
D.03	Performance Appraisal	Rejected
D.04	Intrinsic Reward	Rejected
D.05	Extrinsic Reward	Rejected

4.5.3.1 Influences with Different Relationship

To further understand the influences between variables in Section D and other variables in the survey questionnaire, various relationships are studied and tabulated as follows. According to Table 4.22, it shows the relationship between all variables in Section D and the types of industry sector. Based on the data collected, project managers from the construction industry have the perception of "Extrinsic Reward" or "D.05" is the most preferred strategy with a mean value of 4.500 and Relative Important Index of 0.9009. This clearly indicated that the majority of the project managers from the construction industry agreed extrinsic rewards such as pay raises, bonuses, and company benefits are the most effective strategies to improve project managers' leadership skills. Not only that, but the "Extrinsic Reward" or "D.05" also scored the highest mean score for both project managers from advertising industry and technology industry.

Meanwhile, the "Mentoring Program" or "D.01" scored the highest mean score for project managers from the education industry with a mean value of 4.000. In other words, the "D.01" is ranked number one with a Relative Important Index value of 0.8000 among the project managers from the education industry. At the same time, the "D.01" also scored the highest mean score with a mean value of 5.000 for project managers from the manufacturing industry. The same mean ranking goes to the project managers in the health care industry.

Last but not least, the relationship between all variables in Section D and the designation of respondents are studied and tabulated in Table 4.23. According to the data shown in Table 4.22, the "Intrinsic Reward" or "D.04" has the highest mean value of 4.440 for junior-level project managers. To be more precise, this variable has the highest Relative Important Index of 0.8800. Other than that, the "Intrinsic Reward" or "D.05" has the highest mean value of 4.580 and Relative Important Index of 0.9165 for senior-level project managers. This simply means that most of the senior-level project managers agreed that intrinsic rewards are the most useful and effective ways to improve project managers' leadership skills. The "D.05" also has the highest mean value of 4.690 and Relative Important Index of 0.9375 for managerial level project managers. Out of five (5) key strategies in Section D, two of the variables which include "D.04" and "D.05" have the highest mean value of 5.000 and Relative Important Index of 1.000 for project managers from the executive level.

Relationship between Type of Industry Sector

Table 4.22: Section D- Relationship between Type of Industry Sector.

Code	Construction				Advertising and Marketing				Computer and Technology				Education				Manufacturing				Health Care				Others			
	N= 111				N= 10				N= 5				N= 3				N= 3				N= 1				N= 5			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
D.01	4.160	1.345	0.8324	3	4.000	1.633	0.8000	3	3.600	1.949	0.7200	3	4.000	1.732	**0.8000**	**1**	5.000	0.000	**1.0000**	**1**	5.000	0.000	**1.0000**	**1**	2.200	1.789	0.4400	5
D.02	3.860	1.066	0.7730	5	3.600	1.174	0.7200	4	3.600	1.517	0.7200	3	3.330	1.155	0.6667	3	4.000	0.000	0.8000	3	4.000	0.000	0.8000	2	2.800	1.304	0.5600	3
D.03	3.880	1.077	0.7766	4	3.600	1.265	0.7200	4	3.400	0.894	0.6800	4	3.670	1.528	0.7333	2	4.670	0.577	0.9333	2	4.000	0.000	0.8000	2	2.600	1.517	0.5200	4
D.04	4.480	0.796	0.8955	2	4.300	0.675	0.8600	2	4.200	1.095	0.8400	2	3.330	2.082	0.6667	3	3.670	1.155	0.7333	4	3.000	0.000	0.6000	3	4.600	0.894	0.9200	2
D.05	4.500	0.893	**0.9009**	**1**	4.500	1.080	**0.9000**	**1**	5.000	0.000	**1.0000**	**1**	2.670	1.528	0.5333	4	4.000	1.000	0.8000	3	4.000	0.000	0.8000	2	4.800	0.447	**0.9600**	**1**

Relationship between Designation of Respondents

Table 4.23: Section D-Relationship between Designation of Respondents.

Code	Junior Level				Senior Level				Managerial Level				Executive Level				Director/Top Management			
	N= 75				N= 45				N= 16				N= 2				N= 0			
	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank	Mean	SD	RII	Rank
D.01	4.080	1.459	0.8160	3	4.020	1.373	0.8044	3	4.310	1.493	0.8625	2	3.500	2.121	0.7000	2	-	-	-	-
D.02	3.800	1.065	0.7600	4	3.800	1.160	0.7600	5	3.880	0.885	0.7750	5	2.500	2.121	0.6000	3	-	-	-	-
D.03	3.710	1.194	0.7413	5	3.910	1.019	0.7822	4	4.060	0.929	0.8125	4	3.500	2.121	0.7000	2	-	-	-	-
D.04	4.400	0.900	**0.8800**	**1**	4.440	0.785	0.8889	2	4.250	0.931	0.8500	3	5.000	0.000	**1.0000**	**1**	-	-	-	-
D.05	4.360	1.061	0.8720	2	4.580	0.783	**0.9156**	**1**	4.690	0.602	**0.9375**	**1**	5.000	0.000	**1.0000**	**1**	-	-	-	-

4.5.4 Spearman's Correlation Test

Spearman's Correlation Test in Table 4.24 was conducted to determine the relationship between leadership skills required by project managers and strategies to improve them. All the data generated from this research can be used as reference materials to improve project managers' leadership skills in the future. Not only that, but it is also hoped that more attention can be paid to them in future studies. According to the data collected, it can be concluded that there are positive and negative correlations between the two relationships. The average Spearman correlation coefficients were strong and had static significance.

First and foremost, the "Mentoring Program" or "D.01" has the most negative correlations, which are five (5) negatives value in total. This includes "C.03", "C.04", "C.06", "C.07", and "C.08" are negative correlations. As a result, it can be asserted that the "Mentoring Program" or "D.01" might have a negative impact on the leadership skills mentioned above. Meanwhile, the "Training" or "D.02" also has five (5) negative correlations in total. Five of the negative correlations include "C.03", "C.04", "C.06", "C.07", and "C.08". Thus, this simply means that "Training" or "D.02" may hurt the performance of these five leadership skills.

The "Performance Appraisal" or "D.03" has two negative correlations in total. This includes "C.02" and "C.06" which are negative correlations. However, the "Intrinsic Reward" or "D.04" has only one negative correlation. This indicates that "D.04" is an effective strategy that is suitable for eight of the identified leadership skills. The "D.04" only has negative impact on the "C.01", which has the value of -0.327. Similar to "Intrinsic Reward", the "Extrinsic Reward" or "D.05" is another effective strategy to improve leader skills for project managers. This is because "D.05" only has two negative correlations in total. This includes "C.01" and "C.09" which are negative correlations. In a nutshell, there is no single way to improve leadership skills. It required multiple considerations in order to develop and improve leadership skills optimistically and effectively.

Table 4.24: Relationship between Leadership Skills and Strategies to Improve It.

	Variable	C01	C02	C03	C04	C05	C06	C07	C08	C09
D01	Correlation Coefficient	0.826**	0.059	-0.060	-0.051	0.097	-0.040	-0.055	-0.034	0.153
	Sig. (2-tailed)	0.000	0.492	0.486	0.552	0.259	0.640	0.520	0.688	0.074
	N	138	138	138	138	138	138	138	138	138
D02	Correlation Coefficient	0.646**	0.130	-0.055	-0.014	0.070	-0.030	-0.066	-0.069	0.041
	Sig. (2-tailed)	0.000	0.128	0.519	0.868	0.415	0.731	0.442	0.422	0.632
	N	138	138	138	138	138	138	138	138	138
D03	Correlation Coefficient	0.525**	-0.030	0.138	0.083	0.094	-0.020	0.044	0.088	0.174*
	Sig. (2-tailed)	0.000	0.726	0.105	0.332	0.273	0.813	0.612	0.305	0.041
	N	138	138	138	138	138	138	138	138	138
D04	Correlation Coefficient	0-.327**	-0.036	0.184*	0.164	0.152	0.176*	0.177*	0.231**	0.045
	Sig. (2-tailed)	0.000	0.678	0.031	0.055	0.075	0.039	0.038	0.006	0.597
	N	138	138	138	138	138	138	138	138	138
D05	Correlation Coefficient	-0.219**	0.082	0.024	0.079	0.123	0.095	0.063	0.006	-0.050
	Sig. (2-tailed)	0.010	0.337	0.778	0.358	0.150	0.270	0.462	0.949	0.563
	N	138	138	138	138	138	138	138	138	138

Note: **Correlation is significant at the 0.01 level (2-tailed) / * Correlation is significant at the 0.05 level (2-tailed)

4.6 Summary

This chapter had discussed comprehensively on the essential leadership skills for project managers in Malaysia. A total of 138 sets of survey questionnaires were collected from the project managers across Malaysia's several industry sectors. The project managers from the construction industry were the main respondent in this research study. All the data collected from the survey questionnaires were analyzed by using statistical tests including Arithmetic Mean Test, Cronbach's Alpha Reliability Coefficient, Kruskal Wallis Test, and Spearman's Correlation Test. To develop a deeper understanding of the pattern from different designations of respondents, all the respondents' background were summarized in a table format and explained in detail over several paragraphs. Not only that, but all the analysis results also explained in a detailed manner, making it easier to understand the differences in results based on the research objectives.

The Section B of the survey questionnaire was conducted by focusing on the main differences between managerial skills and leadership skills. All the data collected for this section of the survey questionnaire were analyzed using Cronbach's Alpha Reliability. The Cronbach's coefficient alpha value for this section is 0.864, which is ranged between $0.8 \leq \alpha < 0.9$. This simply indicates that the internal consistency is within the good range. Not only that, but all the data collected for this section was also analysed through the Relative Important Index (RII). All of the variables in this section have a mean value of more than 3.000. The highest mean ranking is "Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done" or "B.04" with a mean value of 4.0797 and Relative Important Index of 0.815 among ten (10) main differences. As previously mentioned, Kruskal-Wallis Test is also adopted in this section for determining the statistically significant differences among the five designations' group. The Kruskal Wallis H Test showed that "Leader emphasized on what has to be done but manager emphasized on how things are done" or "B.03" has significant perception difference between the project managers from different designation as the asymptotic significant value that is smaller than 0.05. Other than that, all of the variables in Section B passed the null hypothesis (H_0). This

simply indicates that all the main differences between managerial skills and leadership skills are generally equal.

On top of that, Section C of the survey questionnaire was conducted by focusing on the leadership skills required for project managers to manage their projects in an effective and efficient manner. All the data collected for this section of the survey questionnaire were analyzed using Cronbach's Alpha Reliability. The Cronbach's coefficient alpha value for this section is 0.822, which is ranged between $0.8 \leq \alpha < 0.9$. This simply indicates that the internal consistency is within the good range. Not only that, but all the data collected for Section C was also analysed through the Relative Important Index (RII). All of the variables in this section have a mean value of more than 3.000. The highest mean ranking is "Decision-making skill" or "C.03" with a mean value of 4.180 and Relative Important Index of 0.8362 among nine (9) leadership skills. As previously mentioned, Kruskal-Wallis Test is also adopted in this section for determining the statistically significant differences among the five designations' group. The Kruskal Wallis H Test showed that all the variables in Section C did not have significant perception differences between the project managers from different designation. In other words, there is no asymptotic significant value that is smaller than 0.05. Thus, all the variables in Section C passed the null hypothesis (H_0).

In addition, Section D of the survey questionnaire was conducted by focusing on the strategies to improve the leadership skills of a competent project manager. As previously mentioned, all the data collected for Section D of the survey questionnaire were analyzed using Cronbach's Alpha Reliability. The Cronbach's coefficient alpha value for this section is 0.779, which is ranged between $0.7 \leq \alpha < 0.8$. This simply indicates that the internal consistency is within the acceptable range. Furthermore, all the data collected for Section D was also analysed through the Relative Important Index (RII). All of the variables in this section did have a mean value of more than 3.000. The highest mean ranking is "Extrinsic Reward" or "D.05" with a mean value of 4.480 and Relative Important Index of 0.8957 among five (5) leadership skills. As previously mentioned, Kruskal-Wallis Test is also adopted in this section for determining the statistically significant differences among the five designations' group. The Kruskal Wallis H Test showed that all the variables in Section D did

not have significant perception differences between the project managers from different designation. In other words, there is no asymptotic significant value that is smaller than 0.05. Thus, all the variables in Section D passed the null hypothesis (H_0).

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This is the finale chapter that summarizes the research. The accomplishment on research objectives is reviewed in Section 5.2. Limitations of this research are discussed in Section 5.3. Lastly, some recommendations are pointed out to improve for future research.

5.2 Accomplishment on Problem Statement

One of the problem statements mentioned previously in this research study includes there are still many project management problems that exist within Malaysia's industry sectors (Tabassi et al., 2019). Some of these project management problems include failure to derive project objectives, lack of visibility on the resources planning, lack of team communication, lack of flexibility, poor risk management, poor stakeholder management, poor procurement management, poor claim management, and unreasonable cost projections. The main reason that leads to all these project management problems is mainly due to the lack of leadership skills in most of the project managers. Throughout this research study, there are several leadership skills that competent project managers should possess have been identified in order for them to minimize these project management problems. Meanwhile, the research gap mentioned in this research include the topic of main differences between managerial skills and leadership skills that had rarely been researched upon. Through accomplishing three (3) of the research objectives, this research study addressed the existing research gap.

5.3 Accomplishment on Research Objectives

This research presents the main differences between managerial skills and leadership skills, leadership skills required for project managers to manage their projects in an effective and efficient manner, and strategies to improve leadership skills for project managers. The survey questionnaire is designed according to fulfil all three (3) objectives of the research. All the data collected

from the survey questionnaire are analysed, reviewed, and presented by descriptive statistics. As previously mentioned in Chapter 1, there are three (3) research objectives that have to be achieved throughout the entire research. Thus, the achievement of the research is tabulated in Table 5.1.

Table 5.1: Achievement of Research Objective.

Research Objective	**Result**	**Achievement**
To identify the main differences between managerial skills and leadership skills.	Among 138 respondents/project managers, the "B.04", "B.10", and "B.09" are the top three main differences between managerial skills and leadership skills.	Yes
To examine the leadership skills required for project managers to manage their projects in an effective and efficient manner.	There are nine (9) identified leadership skills were evaluated in this study. The "Decision making skill", "Team building skill", and "Communication skill" are the most crucial leadership skills required by a competent project manager.	Yes
To investigate how to improve leadership skills for project managers.	There are five (5) identified strategies were evaluated in this study. The "Extrinsic Reward" and "Intrinsic Reward" are the most effective ways to improve leadership skills for project managers.	Yes

5.3.1 Objective 1: To identify the main differences between managerial skills and leadership skills

The first objective is accomplished by providing the respondents to rate their level of agreement on several main differences between managerial skills and leadership skills. Respondents are required to answer ten (10) questions mentioned in Section B based on the Five-points Likert Scale method on the survey questionnaire which will generate the quantitative data. All of the ten (10) main differences between managerial skills and leadership skills and their overall ranking are listed in Table 5.2 below. Based on the data collected, there is not much difference between the views of respondents from different backgrounds. The overall ranking for the top three (3) main differences is "B.04", "B.10" and "B.09" with a mean value of more than 4.000. There is only one (1) main difference that has statistical differences with the designation of the respondents.

Table 5.2: Ranking for Variables in Section B.

Code	Description	Rank
B.04	Leader often will advocate change and suggest innovative ideas throughout the project while managers promote stability to get their project done.	1
B.10	Leader is classified as risk-seeking while manager is described as risk-averse.	2
B.09	Leader is more concerned about people while manager is concerned more about work.	3
B.01	Leader normally focuses on doing the right things while manager focuses on doing the things right.	4
B.08	Leader has followers while manager has subordinates.	5
B.05	Leader often serves subordinate while managers typically serve superordinate.	6
B.03	Leader emphasized on what has to be done but manager emphasized on how things are done.	7
B.07	Leader is responsible to negotiate for resources while the manager had to ensure all the available resources are	8

	well organized and placed at the right place at the right time.	
B.06	Leader focuses more on communication, motivation, and predetermined goals whilst manager is concerned with organizational structure and system.	9
B.02	Leader focuses on delivering the project more effectively while a manager focuses on delivering the project more efficiently.	10

5.3.2 Objective 2: To examine the leadership skills required for project managers to manage their projects in an effective and efficient manner.

To attain the second objective of the research, respondents are required to answer another nine (9) questions listed in Section C. Respondents are asked to provide their opinion on the leadership skills a competent project manager should possess. This question is a closed-ended question that can be answered by rating all the nine (9) leadership skills on the scale of Strongly Disagree to Strong Agree.

A complete project life cycle normally starts from initiating, planning, executing, monitoring, controlling, and closing (Project Management Institute, 2017). This basically implies that a project manager will be responsible for overseeing the project from start to finish. That being said, all nine (9) leadership skills are very vital to the success of any project. A competent project manager should have each of these leadership skills because project managers with more leadership skills are more resilient under duress. The top three leadership skills listed in Table 5.3 are “Decision-making skill”, “Team building skills”, and “Communication skill”.

According to Seetha (2014), communication skill is one of the critical skills required by a competent project manager. Luthra and Dahiya (2015) strongly agreed that effective communication always can lead to better understanding, trust among team members, and a healthy work environment for all employees. Therefore, it is a must for a competent project manager to have excellent communication skills. Unlike communication skills, the “Decision-

making skill" and "Team building skills" are also critical leadership skills that only involved specific designation. To sum up, the result obtained in Section C is in line with the work needs of the real-life industry sector.

Table 5.3: Ranking for Variables in Section C.

Code	**Description**	**Rank**
C.03	Decision making skill	1
C.04	Team building skill	2
C.01	Communication skill	3
C.05	Conflict resolution skill	4
C.02	Problem solving skill	5
C.08	Collaboration skill	6
C.06	Planning skill	7
C.09	Emotional Intelligence	8
C.07	Negotiation skill	9

5.3.3 Objective 3: To investigate the strategies on how to improve leadership skills for project managers.

The third objective of the research is achieved through the evaluation of the respondent's opinion on which strategies to improve leadership skills for project managers were most effective. All of the five (5) questions in Section D are closed-ended questions that can be answered by rating all the strategies on the scale of Absolutely Ineffective to Absolutely Effective.

It is an undeniable fact that rewards are always the motivation for most employees or employers to learn and improve their leadership skills. Therefore, the "Extrinsic Reward" and "Intrinsic Reward" were ranked first and second in this section as the most effective strategies to improve leadership skills for project managers. Whenever project managers' hard work is appreciated and rewarded with extrinsic reward or even intrinsic reward, their job performance definitely will increase.

Table 5.4: Ranking for Variables in Section D.

Code	Description	Rank
D.05	Extrinsic Reward	1
D.04	Intrinsic Reward	2
D.01	Mentoring Programme	3
D.03	Performance Appraisal	4
D.02	Training	5

5.4 Research Limitations

There are a few limitations identified during conducting the research. First of all, the response rates of getting back the survey questionnaire are too low. Response rates of approximating 60% are the goals of this research. However, the response rate for this research was only 39.43%. This indicated that a total of 350 sets of survey questionnaires were sent to the respondents in the construction industry via E-mail, WhatsApp, and LinkedIn but only 138 sets of survey questionnaires were returned. The low response rate would directly affect the results of the arithmetic mean test.

Apart from that, there was an unbalanced distribution of survey questionnaires. According to the table tabulated with the demographic data of respondents listed in Chapter 4, the majority of the respondents are project managers from the construction industry and were came from the group of working experience with less than five (5) years. Not only that, but most of the respondents belong to junior-level project managers. A fair distribution of survey questionnaires should be produced to get a balanced perception from respondents that came from different types of working industry and different levels of position.

Last but not least, there are also limitations in the quantitative approach using digital questionnaires. This is mainly due to the fact that digital questionnaire such as Google Forms could be insufficient for the in-depth exploration of the main differences between managerial skills and leadership skills. Not only that, but the digital questionnaire survey does not provide the chances for the respondents to generate detailed explanation regarding their opinion and thought on this section.

5.5 Research Recommendation

There are some recommendations proposed to solve the research limitations mentioned in the above subsection 5.3. Firstly, limitations such as the low response rate problem can be overcome by increasing the distribution of survey questionnaires through by hand delivery method. As we know, some people might not have Internet access all the time with them. Moreover, people in the senior group would not be online much of the time and they are sometimes too busy to complete the survey in Google Forms on time. They might even forget to fill up the Google Forms after they completed their own tasks. Hence, by hand delivery method can directly increase the survey response rate as the respondents are required to fill up the survey by the time the survey questionnaires being distributed. At the same time, by hand delivery method is also able to minimize fraud survey results and produce higher accuracy of answers compared to Google Forms.

Besides that, another recommendation for future research is to put more time into improving the respondent selection process. Choosing the survey respondents wisely can also improve the research quality. Hence, the respondents for future research should include more respondents from different professions and levels of working experience.

Last but not least, it is suggested to involve qualitative method such as face-to-face interviews as a supplement approach to improve the integrity of the study. The main reason for doing so is to obtain rich descriptive data. Another method to improve the third limitation mentioned above is through having a closed-ended survey questionnaire along with an open-ended survey questionnaire at the same time. This is to collect respondents' opinions and thoughts on particular issues via open-ended questions on a voluntary basis. That being said, the hybrid research method would also be an ideal method to resolve the research limitation.

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APPENDICES

APPENDICES A: Survey Questionnaire

Final Year Project

Dear Respondents,

I am Ang Li Kai, a postgraduate student of Master of Project Management from Lee Kong Chian Faculty of Engineering and Science (LKCFES) at Universiti Tunku Abdul Rahman.

Currently, I am conducting a survey questionnaire for my Final Year Project entitled "ESSENTIAL LEADERSHIP SKILLS FOR PROJECT MANAGERS IN MALAYSIA" to meet the graduation requirements. The purpose of the survey is to investigate the main differences between management skills and leadership skills. Besides that, this survey also aims to examine the leadership skills required for project managers to manage their projects in an effective and efficient manner. Not to mention, the aim of this survey is also to identify the strategies to improve leadership skills for project managers.

As an important part of this research, I need your help and co-operation to complete the survey questionnaire. An estimate of 10 to 15 minutes will be needed to complete this survey. No personal information of the respondents will be revealed. Your responses will be kept private and confidential, and all the information you provided to us will be used for academic purposes only.

Each answer should be based on your own perspective and personal involvement in Malaysia's related projects. If you have any queries, please do not hesitate to reach me at the contact provided below.

Thank you for your precious time and assistance.

Regards,

Ang Li Kai
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Master of Project Management
Universiti Tunku Abdul Rahman

Section A: Personal Information and Background

Please tick (√) the boxes below for your personal information and background.

1. Please select your gender. *

( ) Male

( ) Female

2. Please select your age group. *

( ) 21-30

( ) 31-40

( ) 41-50

( ) 51-60

( ) 60 and above

3. Please select your highest academic qualification. *

( ) High School

( ) Diploma

( ) Bachelor's Degree

( ) Master's Degree

( ) Doctor of Philosophy

4. Please select the type of industry sector of your organization. *

( ) Construction

( ) Advertising and marketing

( ) Computer and technology

( ) Education

( ) Manufacturing

( ) Health care

( ) Others:

5. Please select your designation in your organization. *

( ) Junior Level

( ) Senior Level

( ) Managerial Level

( ) Executive Level

( ) Director/Top Management

6. Please select your years of working experience in the context of project management. *

( ) Less than 5 years

( ) 6 to 10 years

( ) 11 to 15 years

( ) 16 to 20 years

( ) More than 20 years

7. Please select the value of the single largest project that you been involved. *

( ) Not exceeding RM 200,000.00

( ) Not exceeding RM 500,000.00

( ) Not exceeding RM 1 million

( ) Not exceeding RM 3 million

( ) Exceeding RM 5 million

Section B: Identify the main differences between managerial skills and leadership skills.

Different people have used the terms “leadership” and “management” in different ways. While some people use these two phases as synonymous terms, “leadership” and “management” are actually two entirely different concepts. Although “leadership” and “management” possess many similar duties and pre-determined goals, both of them still comprise distinct functions (Wajdi, 2017). Based on your knowledge related to the main differences between managerial skills and leadership skills, kindly rate them with 5 points Likert scale as shown below.

1: Strongly disagree 2: Disagree 3: Neither 4: Agree 5: Strongly agree

Main differences between managerial skills and leadership skills	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. Leader normally focuses on doing the right things while manager focuses on doing the things right.					
2. Leader focuses on delivering the project more effectively while a manager focuses on delivering the project more efficiently.					
3. Leader emphasized on what has to be done but manager emphasized on how things are done.					
4. Leader often will advocate change and					

suggest innovative ideas throughout the project while managers promote stability to get their project done.					
5. Leader often serve subordinates while managers typically serve superordinates.					
6. Leader focuses more on communication, motivation, and predetermined goals whilst manager is concerned with organizational structure and system.					
7. Leader is responsible to negotiate for resources while the manager had to ensure all the available resources are well organized and placed at the right place at the right time.					
8. Leader has followers while manager has subordinates.					
9. Leader is more concerned about people while manager is concerned more about work.					

10. Leader is classified as risk-seeking while manager is described as risk-averse.					

Section C: Examine leadership skills required for project managers to manage their project in an effective and efficient manner.

Leadership skill is one of the most important traits that a competent project manager must display in order to achieve organizational goals and objectives. That being said, a competent project manager should always strive to improve leadership skills from time to time. Please rate desired leadership skills with 5 points Likert scale as shown below.

1: Strongly disagree 2: Disagree 3: Neither 4: Agree 5: Strongly agree

Important leadership skills required by a competent project manager	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Communication skill					
Problem solving skill					
Decision making skill					
Team building skill					
Conflict resolution skill					
Planning skill					
Negotiation skill					
Collaboration skill					
Emotional Intelligence					

Section D: Investigate on how to improve leadership skills for project manager.

Perhaps project managers are not born with strong leadership skills, but leadership skills can be developed. Developing leadership skills requires continuous and collective effort from the project manager itself. Please evaluate a preferable method that you think it might be more suitable for the project manager to improve their leadership skills.

1:Absolutely ineffective 2:Ineffective 3:Neutral 4:Effective 5:Absolutely effective

Strategies to improve leadership skills for project manager	Absolutely ineffective (1)	Ineffective (2)	Neutral (3)	Effective (4)	Absolutely effective (5)
Mentoring Programme					
Training					
Performance Appraisal					
Intrinsic Reward					
Extrinsic Reward					

END OF THE SURVEY AND THANK YOU SO MUCH FOR YOUR PARTICIPATION!