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Chapter 7

Leadership Competencies Affecting Projects in Organization

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Additional information is available at the end of the chapter

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Abstract

Leadership and organizational culture are linked to project performance. The culture of the organization exerts an influence on the leader and shapes the actions and competencies of the leader with the passage of time. For last few decades, project management has extensively been involved in management of projects but still projects are not guaranteed to be successful in various organizational environments. There are certain factors affecting management of projects in different situations where the competence of project leadership is one of the key factors. This chapter employed different keywords and methods for selection of articles synthesizing findings and research gaps of earlier studies. This chapter offers certain limitations and future directions for researchers. The outcomes of this chapter are expected to advance the body of knowledge and help the practitioners in the field of leadership and project management.

Keywords: leadership, competencies, project manager, organizational culture

1. Introduction

Early management and leadership studies viewed the organization as a gateway to leadership [1] and in many cases both the terms had been used interchangeably [2, 3]. However, the contemporary literature considers the two concepts different from each other, though with some overlapping boundaries. Leadership is a social relationship where people allow individuals to influence toward organizational change. Leaders have a vision that they can communicate and execute by guiding people into a positive relationship enabling change and growth in organizations. Leadership is process to achieve a common goal where an individual influences a group of individuals. Leadership encourages discussion and debate to guide the

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individuals in a working environment whereas management involves directing people to get from one point to another, using a known set of competencies [4]. The competence of project manager as leader has been recognized in literature [5] and one of the key reasons for failure of project is lack of leadership competence [6].

Competence is a quality or state of ability, effectiveness, sufficiency, or success [7]. However, a disagreement exists over the spellings of the term and two words, competency and competence, which are used with slightly different notion [8]. Competency is related to effective or superior performance in a job which is an underlying characteristic of an individual [9, 10]. Competencies are expressed as the behaviors that an individual needs to demonstrate to perform a job in different organization culture [10, 11]. On the other hand, competences are related to activities in an occupation which are expressed as minimum standards of competent performance [11]. These two concepts can be taken as complementary [8].

The purpose of this chapter is to explore earlier studies on project manager's leadership competencies to synthesize their key findings and future directions for the researchers. A few literature review studies focused on identifying personality and leadership style of the project manager as a success factor [12] and exploring how performance of leadership in project management determines project outcomes [3]. This chapter was guided by the following research questions: (a) What are key leadership competencies explored in literature? (b) What are the key findings of studies on project manager's leadership competencies? and (c) What are future directions suggested by earlier research studies?

2. Literature review

2.1. Leadership competencies

The project manager's role has changed from directing or managing to leading and therefore, a project manager needs to have requisite leadership competencies and skills [57]. Project management studies have highlighted the significance of project manager's leadership competencies in achieving project success [13, 58] and therefore, the researcher has identified a number of leadership competencies required for a project manager. Leadership competencies in project management literature have been classified into three main categories including intellectual competencies (IQ), managerial competencies and emotional competencies by different researchers [12, 14–17].

2.1.1. Intellectual competencies (IQ)

The intellectual competencies refer to intelligence, ability of understanding the work, performing problem solving and cognitive activities such as connecting and applying relevant concepts, systematic thinking and recognizing patterns [15, 17]. Accordingly, three types of intellectual competencies identified in the literature [12, 18], are presented in **Table 1**.

2.1.2. Managerial competencies

Managerial competencies of a project manager play a crucial role in projects and these require a project leader to be able to provide consistent motivation to his or her team, encouraging

Critical analysis and judgment	It relates to collection of appropriate information from an array of resources, investigation of facts, determining merits and demerits, concrete assessment and decision making and understanding the effects of assumptions made [19–21].
Vision and imagination	This refers to innovation and imagination of a leader who has a clear vision of future course, prioritizes work accordingly and anticipates the implications of changes on implementation of his or her vision [19–21].
Strategic perspective	It involves a broader view of issues and their implications in which a leader investigates a broader spectrum of relationships, strikes a balance between near-term and long-term considerations, discovers opportunities and threats, pays attention to requirements of stakeholders and realizes the effects of external factors [19–21].

Source: developed based on [19–21].

Table 1. Summary on types of intellectual competencies.

Resource management	This relates to planning ahead, organizing the resources and coordinating them efficiently and effectively. Moreover, it also involves establishing clear objectives; converting long-term goals into action plans; monitoring and evaluating staff's work regularly and effectively; and giving honest feedback.
Engaging communication	It requires a leader to be a lively and enthusiastic communicator who engages others and wins support. It also includes clear communication of instructions and vision to staff. Further, these communications are tailored to the audience's interests and focus. In addition, leader's communication style inspires staff and audiences and conveys approachability and accessibility.
Empowering	Empowering means giving the staff autonomy and encouraging them to take on personally challenging and demanding tasks. It encourages them to solve problems; produce innovative ideas and proposals; and develop their broader vision. Empowering also means encouraging a critical faculty and a broad perspective, as well as encouraging the challenging of existing practices, assumptions and policies.
Developing	It requires a leader to believe that others have potential to take on ever more-demanding tasks and roles, encourages them to do so. Therefore, a leader develops their competencies; invests time and effort in coaching them so they contribute effectively and develop themselves; and identifies new tasks and roles to develop them. The leader believes that critical feedback and challenge are important and ensures direct reports have adequate support.
Achieving	A leader must involve significant risks as opportunity to get advantage and make decision. The core business issues and their likely impact on success of any project or organization are considered by the leader while making futuristic decisions. The leaders prefer to choose such activities that contribute toward the organization and its performance. Further, a leader shows an unwavering determination to achieve objectives and implement decisions.

Source: developed based on [19–21].

Table 2. Summary on types of managerial competencies.

them to attain excellence and quality in their performance, looking for ways to improve production and standards. According to the literature, managerial competencies have dimensions which are presented in **Table 2**.

2.1.3. Emotional competencies

The person's ability to perceive, identify and manage his or her emotions as well as understanding and regulating those of others are the basis for the emotional competencies. A certain level

of emotional intelligence is compulsory to learn these competencies. According to Trivellas [16], successful project managers have higher levels of emotional intelligence as compared to their counterparts. Emotional competencies have seven dimensions which are presented in **Table 3**.

2.2. Theories of leadership

A leader has cognitive (managerial) and cathectic (emotional and motivational) functions. Aristotle's view was that a leader must build relationships with the team, advocate a moral vision, and induce by logic to manage actions. The concept of leadership has evolved over last 80 years and resulted in six leadership theories which are presented in **Table 4**.

Competency theory is a blend of all earlier theories as it encompasses emotional intelligence, behaviors and traits in terms of competencies [8, 22]. Therefore, leadership Competencies are the skill set, knowledge and behavior through which different organizations assess and develop the leader within the organization. The research on leadership gave rise to

Self-awareness	Self awareness is about the leader's own capability and feelings which helps to recognize and manage activities in a way that one experience that one can manage. It includes awareness of one's own feelings and the capability to recognize and manage these in a way that one feels that one can control. Therefore, leader requires a certain level of capability of self-belief to control one's emotion and manage their activities to efficiently perform in working environment.
Emotional resilience	Emotional resilience requires a leader to perform consistently in a range of situations under pressure and adapts behavior appropriately. Moreover, he or she balances the needs of the situation and task with the needs and concerns of the individuals involved. Further, a leader focuses on strategy to cope with personal challenges or criticism to achieve better results.
Intuitiveness	Intuitiveness is a capability of leaders to develop their decision making and effective implementation of decisions. The decisions made by intuitiveness leaders should be clear even though presented with ambiguous or incomplete information.
Interpersonal sensitivity	Leaders with interpersonal sensitivity should be aware of the perceptions of others to make decisions and propose solutions. This competency demands that a leader should be aware of others achievements and commitments to actions or decisions. The leaders should actively listen for their constructive inputs and criticism.
Influence	The leaders encourage views of others based on understanding of their position and stature. The leaders appreciate to listen to the perspective of others and provide rational for change in organization.
Motivation	Motivation competency pertains to having drive and energy to achieve clear results and make an impact. It requires a leader to balance short- and long-term goals with a capability to pursue demanding goals in the face of rejection or questioning.
Conscientiousness	Leaders having conscientiousness competencies exhibit personal commitment, ethical consideration, and solution to business issues. The leaders encourage others to support the chosen directions and display commitment for providing course of action to manage challenges.

Source: developed based on [19–21].

Table 3. Summary on types of emotional competencies.

Trait theories	These theories remained famous until 1940s which said that successful leaders possessed similar traits and assumed that leaders are born not made.
Behavioral theories	Behavioral theories were prominent from 1940s to 1960 and said that leaders adopted some specific behaviors and thus leaders could be made.
Contingency theories	These theories remained center of focus during 1960s and 1970s and suggested that success of a leader was dependent on situation.
Visionary or charismatic theories	The visionary school of thought was famous from 1980s to 1990s and these theories were based on the studies of effective business leaders who introduced a change in their organization.
Emotional intelligence theories	These were famous during late 1990s and these suggested that it was the emotional intelligence that had more effect on leader's personal performance as well as that of his or her team, rather than leader's intellectual capability.
Competency theories	These theories gained popularity during late 1990s and these focused on the competencies of successful leaders rather than their traits, as was the case of *the trait theories,* and therefore these theories suggested that one could learn the competencies [13] and thus leaders could be made [12, 14, 15, 17].

Source: developed by the author based on review of literature.

Table 4. Summary on theories of leadership.

six leadership theories that evolved over a period of the last 80 years [12, 14, 15]. These theories have been adopted in all aspects of management, including organizational management and project management, with necessary adjustments specific to these areas. The most recent of these theories is the competency theory of leadership that gained popularity during late 1990s.

2.3. Classification of leadership competencies

The use of different tools and techniques has not helped in reducing the failure rate in projects. This situation has allowed the focus to shift from technology, techniques and hard skills to soft skills and leadership as a solution to the problem of project failure. Leadership competencies involved in effective management of projects can be classified at four different levels.

2.3.1. Managing self

Project managers tend to have multiple skills and competencies to more competitive and prominent because traditional managerial skills are not enough for effective business in functional or matrix based organization. Such skills and competencies are essential for project managers to perform activities effectively because a project manager's job is more demanding and tend to deal with uncertain circumstances. Classification of competencies at level of managing self is presented in **Table 5**.

Project managers act as a role model for the team members who establish an environment of honesty and provide opportunity for continuous learning. Project managers should possess good interpersonal skills and the need to focus on developing skills of the people involved in the project. In project environment, a leader provides flexible environment and encourage

Integrity/honesty	A leader behaves in an honest, fair, and ethical manner and shows consistency in words and actions also exhibit high standards of ethics.
Interpersonal skills	These skills require a leader to treat others with courtesy, sensitivity, and respect. He or she considers and responds appropriately to the needs and feelings of different people in different situations.
Continual learning	Continual learning refers to assessing and recognizing own strengths and weaknesses and pursuing self-development.
Resilience	It refers to dealing effectively with pressure; remaining optimistic and persistent, even under adversity and recovering quickly from setback.
Oral communication	Leader makes clear and convincing oral presentations, listens effectively and clarifies information as needed.
Written communication	A leader writes in a clear, concise, organized, and convincing manner for the intended audience.
Flexibility	Flexibility means a leader is open to change and new information and rapidly adapts to new information, changing conditions, or unexpected obstacles.
Problem solving	This competency ensures that a leader identifies and analyzes problems; weighs relevance and accuracy of information; generates and evaluates alternative solutions; and makes recommendations.

Source: developed by the author based on review of literature.

Table 5. Classification of competencies at level of managing self.

problem solving approach. Oral and written communication of a leader in the project should be clear, concise and convincing.

2.3.2. Managing people

A lot of risks and uncertain circumstances are associated with projects during the life cycle. To cater such types of risks and situations, project manager must be able to manage the people though managerial and leadership skills. Every stage of a project or situation requires different leadership skills or competencies. Classification of competencies at level of managing people is presented in **Table 6**.

For effective management of projects, a project leader must be competent to manage the people and involved in recruitment and selection process of team members. The selected workforce must be on the basis of need those should be able to achieve the mission and targets of the organization. The project leader should focus on differences and values of people at workplace in addition to appreciating constructive criticism and listening differences of opinions. Project manager ensures the public interest and develop the abilities of their team members.

2.3.3. Managing projects

Leadership competence of a project manager does not mean that project would be successful but it increases the likelihood of project success. Project manager's both management and

Human capital management	It refers to building and managing workforce based on organizational goals, budget considerations, and staffing needs. A leader ensures employees are appropriately recruited, selected, appraised, and rewarded; takes action to address performance problems and manages a multi-sector workforce and a variety of work situations.
Leveraging diversity	This competency requires a leader to focus on differences and values of individuals at workplace. This focus of leaders in organization helps to achieve the visions and mission. The leaders have diversity and leverage to achieve organization outcomes.
Conflict management	Conflict management one of the key issue at workplace. A leader appreciates constructive criticism and welcome to listen differences of opinions from others. The leader avoids confrontation at workplace and encourages resolving conflicts or disagreements through constructive discussion
Public motivation	Leaders show commitment to serve the public and ensure that needs of the public are fulfilled. These leaders focus on public interest aligned with organizational objectives and culture.
Developing	Developing is an ability of leaders to develop the team members who perform to contribute toward the organization. Leaders with developing approach provide continuous feedback to improve performance and provide opportunities of formal and informal organizational learning.

Source: developed by the author based on review of literature.

Table 6. Classification of competencies at level of managing people.

leadership competencies ensure the effective management of projects through coordinated project management processes and team members. Classification of competencies at level of managing projects is presented in **Table 7**.

For successful implementation of projects, project managers focus on team building and creating an environment of trust and motivation. Project managers employ appropriate skills and knowledge to meet the expectations of both internal and external project stakeholders. Project managers are responsible for achieving time, cost and quality parameters in projects. In projects, project managers have to take right and timely decisions with consensus of all key stakeholders.

2.3.4. Managing programs

Programs are combination of multiple projects in an organization with short-term and long term objectives. Project leader motivate and guide the team members to achieve organizational goals and objective through effective implementation of programs. Classification of competencies at level of managing programs is presented in **Table 8**.

Project leader ensures effective use of technology and keep up to date on technological advancement for achieving high results and managing financial constraints. To ensure effective management of programs and achieve common goals, project leader encourages creativity and innovation, develop strategic partnerships, and identify internal and external politics.

Team building	Leaders build their team through commitment, feeling pride, and establishing environment of trust. Leaders with strong team building abilities always extend cooperation and motivate team member to achieve desired goals.
Customer service	Leaders prefer to meet the expectations of both internal and external customers. Leaders consistently deliver high quality product or services to the customer for improving their organizational performance.
Technical credibility	Leader's technical competency refers to understanding of appropriate skills, knowledge, policy and procedures. Leaders ensure to meet the technical demand of customer based on their specialized expertise.
Accountability	Leaders hold themselves accountable for achieving high quality, timely, and cost effective outcomes. To meet the objectives, a leader set priorities, accept the responsibilities in case of any mistakes, delegates work to the team, and ensure compliance with defined procedures and rules.
Decisiveness	A leader considers the impact and implications of decisions made to achieve the desired objectives in an organization. Leader ensures to take timely and effective decision based on available information.
Negotiation	Negotiation is competency of a leader to persuade others; build consensus through give and take; gain cooperation from others to obtain information and accomplish goals. Negotiation is one of the key skills of a leader to satisfy the customer or any stakeholder.

Source: developed by the author based on review of literature.

Table 7. Classification of competencies at the level of managing project.

Technology management	A leader keeps up-to-date on technological developments, makes effective use of technology to achieve results and ensure access to and security of technology systems.
Financial management	This competency refers to understanding the organization's financial processes; preparing, justifying and administering the program budget. It also involves overseeing procurement and contracting to achieve desired results; monitoring expenditures and using cost–benefit thinking to set priorities.
Creativity/innovation	It pertains to developing new insights into situations; questioning conventional approaches; encouraging new ideas and innovations; designing and implementing new or cutting edge programs/processes.
Partnering	A leader develops networks and builds alliances; and collaborates across boundaries to build strategic relationships and achieve common goals.
Political savvy	Political savvy helps leader to identify the internal and external politics that impact the work of the organization. As a result, he or she perceives organizational and political reality and acts accordingly.

Source: developed by the author based on review of literature.

Table 8. Classification of competencies at level of managing program.

3. Research methods

In this chapter, those articles were considered for review which must be published in the English and peer reviewed journal. Furthermore, specific searching keywords were used to identify relevant articles published on project manager's leadership competence during

2005–2017 from different databases including Web of Science, Emerald, Taylor & Francis, Science Direct, SAGE, IEEE, etc. The searched articles were scrutinized to avoid any duplication. Then only those studies were included which discussed project manager's leadership theory either qualitatively or quantitatively.

4. Results of research

Based on extensive literature review, findings and research gaps of earlier studies published from 2005 to 2017 on project manager's leadership competence are summarized in this section. Project managers focused on task-oriented, intellectual, managerial and emotional competencies to enhance the likelihood of project success, summary of which is presented in **Table 9**.

The researcher suggested more research should be conducted on leadership competencies involving all key project stakeholders during data collection. Situational and emotional theories

Author/year	Findings	Research gaps
Ahmed and Anantatmula (2017) [6]	• Task-oriented leadership competencies of project managers significantly and positively affect project performance in public sector projects.	• Data collection from all key project stakeholders instead of only project managers to identify other leadership factors affecting performance of projects.
Tabassi et al. (2016) [23]	• Leadership competencies directly impact the success criteria for sustainable building projects and intellectual competencies of project managers can play the most significant role in sustainable building achievements.	• Leadership behavior could be further enhanced by integrating additional constructs, such as situational theories, emotional and social dimensions as well as the moderating roles of education, experience and gender of leaders.
Ahadzie et al. (2014) [24]	• From the senior management perspective, project managers must possess leadership competences toward ensuring effective management at the design phase of the project.	• Conceptual, tender, procurement and operational phases of the project lifecycle may be considered by further research work.
Galvin et al. (2014) [25]	• There is a need to apply literature review and surveys for subsequent exploration of the importance of leadership competencies, management techniques, and styles of leadership that project managers effectively employ to manage teams and individuals.	• Limiting the participants to a maximum of 10 questions per survey, assigning a limited timeframe to collect, gather, analyze, and report survey results. • A larger sample size is certain to make the results statistically more significant.
Medina and Medina (2014) [26]	• Need to redefine project manager's long-term strategic competence management. • Need for inclusion of project manager's HRM (human resource management) practices in project management theories • There is a need for a projects perspective in HRM literature to improve the performance of organizations.	• Participants, excluding project manager or project team member roles, may provide a deeper understanding of HRM in projects. • Identify the relationship between project manager's involvement in HRM practices, motivation, and project success.

Author/year	Findings	Research gaps
Nahod et al. (2013) [27]	• Concrete evidence exists that competencies can be linked to project success. • The perception and importance of leadership competencies may help diagnose the expected project success and may increase the prospect of its timely impact on a project.	• Defining a clear rule for the impact of competences on project success. • Future research should consider leadership competencies examined at the time of appointment of project managers and analyze their subsequent impact on projects.
Müller et al. (2012) [20]	• Positive correlation exists between EQ (emotional intelligence), IQ (intellectual competencies), and MQ (managerial competencies) competencies, and project success. • The presence of project complexity as a moderator variable lowered the significance of the relationship between project manager's leadership competencies and project success.	• Future research may use the competence school of leadership and the Leadership Dimension Questionnaire (LDQ) approach derived at industry, sector, or country levels. • Further studies in assorted cultures or disciplines may enlighten other aspects of complexity in projects on account of new questions.
Anantatmula (2010) [28]	• Study found that defining roles and responsibilities is the foremost step for managing and leading projects successfully. • The leadership and technology roles could be different based on the disposition of project characteristics and the industry. • Leadership roles could be industry-specific due to differing industry-specific work cultures and competitive environments.	• Further exploration of project leadership roles for different types of projects and different industries to be taken up by increasing the data size and diversity of participants. • In addition, this model should be used in various projects and different industries to validate and confirm these results.
Battilana et al. (2010) [29]	• Mixture of leadership competencies might influence the amount of emphasis leaders put on each of the three key activities associated with the implementation of planned organizational change, which requires further investigation. • In the absence of leaders who are effective at both task-oriented and person-oriented behaviors, employing multiple changes with complementary competencies might be an effective way to address the implementation process.	• The following questions merit further exploration: • Do leaders need to emphasize all change implementation activities to successfully implement change? • Are the leaders who do so the most successful? • Answers to these questions are likely to vary depending on the type of change and the type of organization in which change is implemented.
Müller and Turner (2010) [21]	• Leadership competencies directly correlate with project success measures. • Competencies in managing resources and the strategic perspective of the project manager, in particular, correlate with the majority of success measures in projects. • Attitudes directly correlate with project success (namely customer and end-user satisfaction).	• The differences to be looked into by project type, industry, and geography. • The complexity of the human personality provides features and rich avenues for further research, which can help academics to understand the project phenomenon, and practitioners to become more successful in delivering projects.

Author/year	Findings	Research gaps
Geoghegan and Dulewicz (2008) [13]	• There exists a link between managerial competencies and project success. • The MQ leadership dimensions seem to play a significant role in influencing or affecting project success. • The leadership-project success model developed is likely to be of interest to any project-based organization.	• To establish a relationship between leadership dimensions and project success factors, broader study encompassing a cross-section of industries and countries is required that could be transferable to any organization.
Müller and Turner (2007) [30]	• Project manager's leadership competencies are correlated with project success and different leadership styles are appropriate for different types of project. • Significant correlations were found with each of the three competence types, EQ, MQ and IQ, and each of the constituent competency dimensions.	• There is a scarcity of literature addressing the need for different leadership styles for different types of projects. • Moreover, the contribution of the project manager's leadership style to project success has largely been ignored.
Prabhakar (2005) [31]	• Relationship-oriented project managers provided more successful projects. • The more experienced the project manager, the higher chances of project success. • The transformational approach was a positive role model for the team.	• Future research to define and quantitatively and relate switches in leadership approaches with success on projects.
Dulewicz and Higgs (2005) [19]	• The results support the use of leadership assessment and development for identifying potential in both public and private sector organizations. • The selection of leaders should become more accurate and development actions contained in the LDQ may report more focused relevance.	• Further research should investigate interactions between follower commitment and leader performance via self-appraisal. • Dimensions of leadership to be closely linked to various aspects of commitment.

Source: developed by the author based on review of literature.

Table 9. Summary of findings and research gaps on project manager's leadership competencies.

should be integrated to conduct research in all phases of project life cycle. Roles and responsibilities should be clearly defined in the project and a larger sample size may be collected for research other than project managers and team members. Leadership competencies should be considered at the time of appointment of project managers and their impact on projects at different industry, sector, or country level needs to be explored. The role of project leadership should also be considered by quantitative studies at the level of a cross-section of industries and countries.

The leadership styles of project managers contribute in adoption of information technology and knowledge sharing which can impact on projects. There is a strong link between transformational project leaders and satisfaction of project team members. Leadership styles adopted

at senior, middle and lower levels can be different in different projects. Summary of findings and research gaps on project manager's leadership styles is presented in **Table 10**.

Different leadership styles of project managers in different situations are required to be identified. Future research should consider collecting more responses and applying different sampling methods for collection of data. Employees other than project managers may be considered for designing their competency profiles at company level and using qualitative data.

Author/year	Findings	Research gaps
Tseng (2017) [32]	• Leadership style and organization culture significantly moderate information technology adoption and knowledge sharing intention.	• Due to inadequate respondents, future research should apply random sampling method to collect more responses.
Larsson et al. (2015) [33]	• Project managers' leadership style can affect project performance and it is a significant project success factor.	• Appropriate project managers leadership styles should be identified for different situations with different characteristics to optimize performance.
Moynihan et al. (2012) [34]	• A direct relationship exists between transformational leadership and performance management success. • Transformational leadership can observe a powerful but indirect role in "setting the table" for the success of important management processes such as performance management.	• Future research may find insignificant or a negative relationship between transformational leadership and other forms of performance information use.
Shibru and Darshan (2011) [35]	• A strong correlation exists between the components of transformational leadership and subordinate satisfaction with the leader.	• Further research should consider other industrial sectors and other leadership outcomes, i.e. effectiveness, extra effort, commitment, and 'organizational citizenship'.
Limsila and Ogunlana (2008) [36]	• Leadership styles adopted at the senior management level can be different from those adopted at the professional to technician or worker level. • Transactional leadership is chosen to lead technicians or site workers and may need to adopt transformational leadership when dealing with other professionals.	• The research findings can be verified by using other instruments to measure leadership behaviors and personal competencies or to employ several instruments simultaneously and results can then be contrasted.
Chan and Chan (2005) [37]	Found strong link between transformational and transactional leadership in organizations and project environments in the context of construction industry.	• Potential effects of the relationships between leadership styles and outcomes, at the company level using qualitative data through focus group interview. Plus there is the need for exploration to produce more interesting and rich data.

Source: developed by the author based on review of literature.

Table 10. Summary of findings and research gaps on project manager's leadership styles.

There is a need of greater commitment among project manager and human resource department. Managerial, personality and emotional intelligence competencies of project managers along with other characteristics and attitude are helpful in projects. Summary of findings and research gaps on project manager's emotional competencies is presented in **Table 11**.

Author/year	Findings	Research gaps
Blaskovics (2016) [38]	• Personal characteristics of project managers and project management attitudes are highly important for achieving project success.	• The features of the project manager other than personal characteristics and pm attitude need to be identified.
Khanaposhtayi and Abyane (2015) [39]	• Emotional intelligence competencies of project managers had high importance compared to other competencies, which should be considered by project-based organizations along with competent project managers.	• Competency profiles may be designed for the employees other than project managers working on various positions in organizations.
Montequin et al. (2015) [40]	• Most successful project managers possess common core traits, such as extroversion, rational judging and structured behaviors.	• Managerial and personality profiles should be connected to correlate personality types to leadership styles.
Obradovica et al. (2013) [41]	• A positive relationship exists between project managers' emotional intelligence and their professional success. • Improving project managers' emotional intelligence is significantly beneficial for the organization, project and team success, and project management field.	• There is a need for further research to probe for a greater commitment among both the human resource sections and project managers.
Ying et al. (2012) [42]	• The significance of emotional intelligence toward leadership effectiveness is important and there is a need to maintain a balanced interaction between emotions and intellect. • Project leaders may be trained to use a combination of emotional intelligence based competencies and a transformational leadership style for increased effectiveness.	• Future studies should consider larger sample sizes to examine intelligence competencies of individual rather than highlight the significance of specific competencies.
Clarke (2010) [43]	• A number of significant correlations exist between emotional intelligence (EI) measures and the dependent measures examined in the study. Overall EI scores were all found to be positively correlated with the project manager competence associated with teamwork and managing conflicts.	• Identify the extent to which project manager's competencies associated with emotional intelligence related abilities actually account for variations in project outcomes. Plus the significant relationships found in the study can be replicated using much larger populations.

Source: developed by the author based on review of literature.

Table 11. Summary of findings and research gaps on project manager's emotional competencies.

Author/year	Findings	Research gaps
Andersen (2013) [44]	• Different perspectives prevail among project managers and every project should be looked at from the outset and which project management perspective shall effectively rule the work of the project.	• Research may be conducted to see whether project team members have different perspectives.
Fung (2014) [45]	• Project manager's leadership roles are important influencing criteria of project team effectiveness.	• Future studies may include project team members as part of respondents to evaluate their views regarding project manager's leadership roles in developed countries.
Yang et al. (2013) [46]	• Teamwork only partially mediates the link between transactional leadership and project performance.	• Develop different models to validate and compare the efficacy through case studies. • Determine which style of project leadership is best suited for project goals and benefits that leadership competencies offer.
Kuen et al. (2009) [47]	• Empirically supported factors for project management are senior management support, project mission, project team competency, client acceptance and effective communication.	• Success factors of project management were established to develop a new area for further studies to ensure its potential for future sustainable housing.
Malach-Pines and Dvir (2008) [48]	• Significant positive correlations were found between project manager's intuition and high project uncertainty as well as complexity. • Several correlations were found both between certain personality traits and certain project types, and between certain personality traits and project success.	• Findings to be extended to other types of projects with varied cultural, industrial and organizational settings.
Müller and Turner (2007) [49]	• Team satisfaction played a critical role for all results measures. Experienced project managers appeared to have intuitively set priorities with utmost significance. • Certification was not a sufficient contributor in high performing projects. • The importance assigned to team and end-user satisfaction influences almost all reported success measures.	• The concept of project complexity is not yet well comprehended and needs further exploration. • The multitude of cultures may have an adverse effect on project results and should be addressed in future research.
Aronson et al. (2006) [50]	• Teamwork links leader personality to project performance. • Leader personality depends on the level of uncertainty that operating projects possess. • Need to re-consider hiring criteria and the provision of training for project leaders	• Data on a single project may be gathered from multiple sources. • Personality responses may be collected from leaders and performance rating data may be gathered from the senior manager overseeing the project.

Source: developed by the author based on review of literature.

Table 12. Summary of findings and research gaps on project manager's teamwork competencies.

Author/year	Findings	Research gaps
Zhang and Cheng (2015) [51]	• Effective knowledge sharing depends on knowledge leaders to develop a share vision and promote a trustworthy and collaborative environment.	• The role of knowledge leaders in regard to knowledge management practice and the active and cross-functional role of leaders as supporters both at group and individual level may be investigated.
Shokrzadesh et al. (2012) [52]	• A strong positive relationship exists between roles and knowledge management processes. • Managers can exhibit knowledge oriented roles toward employees and knowledge management practices. • The role of managers as a knowledge facilitator encourages knowledge sharing within organizations.	• Managerial roles should take account of variables of knowledge based on roles and industry, other than energy sector, for organizational benefit.
Anantatmula and Thomas (2010) [53]	• Importance and impact of some of the factors contributing to the performance of global projects vary depending upon the industry in which they were executed. • Moreover, project management practices of global projects differ from traditional, co-located, and internal projects.	• Establish the importance and effectiveness of each factor in the model. Establish dependency relations using statistical methods. • Initiate research that should validate the model.
Curran et al. (2009) [54]	• Findings indicated some implications for managerial practices. Projects may suffer from the bureaucratic hurdles that require staffing of comparably strong project leaders. • Furthermore, projects in which a low degree of trust among members is expected should be led using a dominant leadership style.	• Future research requires an examination of the leadership style in cooperative projects involving different knowledge bases or types of knowledge.
Kaulio (2008) [55]	• Courses in project management tend to have a bias toward the rational and planning perspective, comprising a number of techniques and tools. • There should be a re-balancing of the course content toward more leadership issues, such as dyadic leadership and organizational politics at least in the curriculum of advanced courses.	• Future research should address three perspectives including leadership, co-worker, and the organizational setting.
Dolfi and Andrews (2007) [56]	• Optimism in project managers is an important attributes as only 7% of "optimists" and 60% of "pessimists" in the survey negatively rated their work environment. • Findings suggest training and personal development of project managers to better cope with unique project work environment.	• Future research should explore optimism and its impact on project management workplace.

Source: developed by the author based on review of literature.

Table 13. Summary of findings and research gaps on project manager's knowledge competencies.

Project manager's emotional competencies associated with projects that account for variation in project outcomes needs to be explored using larger populations. Improving emotional competencies of project managers are beneficial for learning organization and achieving project success. Emotional intelligence competencies help project managers to encourage teamwork and manage conflicts.

The project manager should clearly identify roles of team members and encourage teamwork. In projects, teamwork is one of the key success factors which should be looked at from the outset in each project. Teamwork establishes links between project manager's leadership competence and project performance. Project managers must take care of the team to best satisfaction level and act as a mentor. Summary of findings and research gaps on project manager's teamwork competencies is presented in **Table 12**.

More research is required to check whether project team members have different perspectives on the project than a project manager. Project team members should be considered as respondents to evaluate the project manager's leadership role in different sectors and countries. Best leadership styles for team members need to be identified that can be suited in multi-culture environment.

Project managers should share the vision and knowledge among team members to transform the idea into reality through projects in a collaborative environment. The project manager should possess knowledge oriented and goal oriented competencies to ensure successful implementation of projects. The success of most of the projects depends on the capacity of the industry in which they are executed and project management practices employed. Project managers should focus on training and personal development of team members which help to cope with the unique project environment. Summary of findings and research gaps on project manager's knowledge competencies is presented in **Table 13**.

Managerial roles of project managers should be considered at industry level and the role of knowledge leaders in cross-functional both at individual and group level can be considered by the researchers and organizations. Different bases or types of knowledge need to consider along with different leadership styles in cooperative projects.

5. Discussion and conclusion

This chapter builds a chronology of project manager's leadership competencies by synthesizing extensive literature to contribute toward the body of knowledge and to provide opportunities for establishing strong links between project manager's leadership competencies and projects. Findings of literature review revealed that greater level of leadership competencies were associated with better project performance. Future directions of empirical studies highlighted in this chapter have not yet been addressed at large and demand for more research. A deeper understanding of the nature of the relationship between leadership competencies and project in different organizational environments could have implications that can help to identify strategies to increase project performance and promote positive behaviors of organizational culture.

Among many other success factors that affect project's success, leadership is one of the key contributing factors. A project manager, who acts a project leader, if have a set of requisite competencies in different organizational culture, including intellectual competencies (IQ), managerial competencies, (MQ) and emotional competencies (IQ) increases the likelihood of project success. However, the literature reveals that different project environments and conditions require a project manager to demonstrate appropriate leadership competencies that best suits for a particular culture and situation. Project manager as a project leader should be competent enough in managing self, managing people, managing project, and managing programs. On the other hand, the project manager needs to learn such leadership competencies applicable in different organizational culture for effective management of projects.

This chapter explores the extensive literature on project manager's leadership competencies, but still there are certain limitations. These leadership competencies explored in this chapter are related to projects and future research should consider reviewing such leadership competencies from other disciplines. The scope of this chapter was to highlight findings and future gaps of studies published on project manager's leadership during the last one decade. Future gaps highlighted in this chapter provide avenues for researchers to conduct further research in order to fill those gaps. Future studies may consider conducting the Systematic Literature Review and Meta Analysis studies on similar topics to provide further insights in the body of knowledge. Finally, this chapter is review based analyses of research studies and in future empirical studies may be conducted to analyze the findings of previous studies.

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