



The Role of Emotional Intelligence in Leadership: A Comparative Study of Traditional and Agile Project Management Approaches

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ABSTRACT

The role of EI on leadership effectiveness within traditional and Agile PM will be the focus of study in this research. In the following study, to examine this relationship, quantitative surveys were conducted along with qualitative interviews. The quantitative data centered on gathering data on EI and leadership performance within senior executives in both PM environments. The study found that the mean EI scores of the Agile PM leaders were significantly higher for self-awareness, self-management and social awareness, and relationship management than the traditional PM leaders. In line with this, qualitative results supported that high EI is significant in Agile PM since specificity, teamwork, and team integration are compelling. Self and Tejeda (2011) affirmed that in Agile environments, leaders with high levels of EI can manage change and promote a team environment. On the other hand, EI, though still relevant in traditional PM, is much less central to the process than in agile PM where technical skills and methods of process management are less mannered by EI's primary PM function, which is to facilitate communication between stakeholders and solve conflicts. Therefore the study concludes that although EI enhances leadership performance in Agile PM through facilitating flexibility and teamwork, it has a more supportive role in traditional PM and suggests that the context of PM requires different leadership development interventions.

Keywords: Emotional Intelligence, Leadership, Traditional Project Management, Agile Project Management, Leadership Effectiveness.

1. Introduction

Emotional Intelligence (EI) has been defined as the capacity to assess and express one's feelings and those of other people and to regulate the emotional responses within oneself and others [1]. In leadership, EI consists of attributes like understanding oneself, managing one's emotions, ability to empathize, and interpersonal communication. These competencies help leaders in perceiving people and relationships, forming teams, and improving decisions. A high EI can help the manager handle stress, and conflicts and also be in a position to lead and encourage the subordinates hence improving the organizational performance [2]. As it is already known, EI is present in leadership, and leadership skills in EI are the ability to build trust and credibility, enhance the work climate, and manage the emotional climate of the team [3]. For instance, it has been established that managers with high levels of emotional intelligence are better placed to manage change and risk, something that is very important in the current environment that is characterized by high levels of volatility and risk [4]. This goes a long way in supporting the call for EI to be used in improving leadership performance and organizational outcomes. The systems of PM methodologies are used to explain how a given project should be started, continued, and ended. The waterfall model is one of the oldest PM approaches that are based on linearity and a sequence of phases in which the next cannot begin until the previous one is complete [5]. On the other hand, Agile PM methodologies, for instance, Scrum, Kanban, and others focus more on iterative progress, flexibility, and more so, improvement [6]. These are meant to be more or less variable and thus can be effective in the ever-changing environment. To be able to compare the two approaches and the

effects that each has on leadership, it is important to consider the traditional as well as the Agile PM approach. Some of the differences are in the structure where the traditional structure is more bureaucratic with well-defined roles and responsibilities while Agile methods support cross-functional and self-organizing teams [7]. The greater the comprehension of how EI affects leadership in the context of these PM environments, the greater the comprehension of leadership competencies that are most appropriate to the context of the particular PM environment. This comparison is important to organizations that want to enhance the management of projects and hence enhance the results of the projects. The research on EI in the context of the two PM paradigms has theoretical implications in the following ways. First of all, it is crucial to identify the role of leadership behaviors and EI skills in the accomplishment of projects about different PM frameworks. This knowledge can be applied in the enhancement of the leadership development initiatives of organizations to suit the chosen PM methodologies.

Second, because the use of Agile approaches to increase the organization's flexibility has become a trend, EI in Agile environments is essential. Therefore, it is also crucial to realize that agile strategies entail leaders making many small decisions, decentralized work, and teamwork, all of which are EI skills [8]. Thus, understanding the effect of EI on leadership in Agile environments will help organizations prepare their leaders for the current challenging project management environment. Last, the research provides an understanding of leadership performance improvement in both the traditional and Agile PM environments. The findings of this research may be useful in designing specific training programs, enhancing the match between leadership behaviors and PM practices, and therefore enhancing project outcomes and team satisfaction.

2. Objectives of the study

- Discuss the Role of Emotional Intelligence on Leadership Performance in the Traditional Framework of Project Management.
- Evaluate the Influence of Emotional Intelligence on Leadership Performance in Agile Project Management Approaches.
- Traditional and agile methodologies: the comparison of the utilization of emotional intelligence to foster leadership efficiency.

3. Literature review

3.1 Emotional Intelligence: Theoretical Background

The concept of EI has changed a lot since the time it was first introduced and when it was for the first time explained. The idea of social intelligence, which can be seen as the antecedent to EI, was introduced by Thorndike in 1920 as the ability to interact with persons [9]. Nevertheless, the modern meaning of EI is associated with the works of Peter Salovey with John Mayer in 1990 who defined it as the ability to effectively recognize and manage emotions [10]. This framework was developed based on the previous theories of intelligence and emotions in the psychological sciences. Goleman introduced his model to the public in 1995 and this helped spread the EI beyond the academic circles. Goleman's model posits that EI encompasses five core competencies: positive character strengths which include; self-awareness, self-control, approach to achievement, interpersonal understanding, and interpersonal interaction [11]. They assist in the formation of interpersonal skills that are essential in the management of relationships in business and family life. This model has become paradigmatic to elucidate how EI influences various domains of personal and organizational life including leadership.

3.2 The Role of EI in Effective Leadership Across Various Domains

Emotional Intelligence has been researched widely in the leadership literature. Research has shown that leaders with high EI perform better on their jobs, make better decisions, and have better-performing teams than those with low EI. This means that leaders who possess high EI are likely to be better placed to identify their own and others' emotions hence improving their leadership skills [12]. It enables them to cope with pressure, be concise, and build good relationships within the teams they belong. Of all the leadership styles, transformational leadership that puts into practice the encouragement of followers is closely related to high EI. A study by Bass and Avolio stated that leaders with high emotional intelligence can foster relationships with the members of the team hence making them work harder. Moreover, studies show that EI is related to leadership outcomes in the education sector, healthcare, and other sectors [13].

Project management as seen in the Waterfall model for instance is defined by rigidity and a sequential process. They are usually designed in advance with more emphasis on preplanned phases, scope, time, and cost control [14]. Managers in traditional PM contexts are expected to be well-organized and meticulous with considerable focus on planning and strict compliance with the guidelines [15]. This type of leadership is more autocratic and there is little room for maneuver once the work has started.

3.3 Leadership Demands in Agile Project Management: Emotional Intelligence as the Tool

Agile Project Management differs from the more traditional approach in that it involves an iterative process that is based on feedback, which in turn requires a flexible approach to management. Unlike conventional frameworks, the techniques of Agile like Scrum, and Kanban are based on the principles of collaboration,

flexibility, and customer satisfaction [16]. The authors of Agile work environments need to demonstrate the ability to create and sustain a positive culture that supports communication, as well as the ability to constantly adapt and respond to the project needs [17]. This means that one is required to adopt a leadership system that will involve availing resources and encouraging the team members to come up with the best solutions instead of the strict control system. However, in this regard, Emotional Intelligence (EI) is of extreme importance. It has been found that leaders with high levels of EI can respond to the challenges that Agile projects present, such as the ability to understand and enhance the interactions between the members of the team, as well as to deal with the level of uncertainty that is associated with the Agile frameworks [18]. When applied by Agile leaders, EI can be used to unite the team, address differences, and help the team navigate through iterative processes, thus, increasing the success rate of the projects as well as the satisfaction levels of the team members [19].

Nevertheless, there are certain limitations of the literature regarding EI and leadership in the context of project management. One of the areas that require further study is how different elements of EI affect leadership effectiveness in the context of known project management methodologies. For instance, research can explore how variables like empathy and self-regulation influence leadership in situations where both traditional and agile project management approaches are applied [20]. Another direction for further research is the expanded analysis of the effects of EI on leadership results in various cultural settings and industries. These dynamics could perhaps shed some light on how EI could be employed to counter the challenges that are characteristic of different settings. Furthermore, the investigation of the place and significance of EI in the new trends of the PM methodologies and their impact on the team and the project results would contribute more information to the field [21].

4. Methodology

4.1 Research Design

To attain a wide perspective of the impact that EI had on leadership performance in traditional as well as Agile PM settings, this research incorporated both quantitative and qualitative research methods. The quantitative aspect of the research was thus to determine the correlation between EI and leadership outcomes, the qualitative aspect gave further insight into how EI influenced leadership in other PM environments.

4.2 Comparative Study Design

By design, the study was comparative and involved both quantitative and qualitative methods of data collection. The quantitative section was conducted through a survey method where numerical data concerning EI levels and leadership effectiveness of leaders in traditional and Agile Project Management was collected. This approach made it possible for a statistical comparison of the effects of EI on leadership in these two different contexts. However, the qualitative aspect involved conducting interviews with some of the leaders to get an understanding of how EI was manifested in their leadership practices. This qualitative information complemented the quantitative work and helped to explain the specific ways in which EI was related to leadership.

4.3 Sampling and Participants

To have a diverse population, stratified random sampling was used to capture participants from both the traditional and Agile project management contexts. Senior executives from different industries were incorporated as the study aimed at getting a cross-sectional view. Participants were selected based on specific criteria: The leaders in traditional project management roles had a minimum of three years of experience in using structure methodologies such as Waterfall while leaders in Agile project management roles had a minimum of three years of experience using Agile methodologies such as Scrum or Kanban. All of the participants had to be currently occupying or have occupied a leadership position in their project management environments and they all consented to be part of the study.

4.4 Data Collection Methods

Data collection was done multiply to ensure that the information collected was complete. Participants were given the Emotional Intelligence Appraisal and Leadership Practices Inventory to compare the EI levels and effectiveness of the leaders. These surveys also incorporated standardized scales for reliability and validity. Apart from surveys, some participants were selected for semi-structured interviews to elicit their views and experiences of EI and how it impacts on their leadership behavior and success. Open-ended questions were used in the interview guide to make the responses more flexible but at the same time maintain a level of structure. Specific examples of high or low EI were also created for several leaders to provide examples of how EI influences leadership in more typical Agile project management circumstances.

4.5 Data Analysis

Quantitative data were collected from both samples and descriptive analysis and t-test were used to analyze the data collected from the two samples while regression analysis was used to compare the relationship between EI and leadership effectiveness in traditional and Agile project management. This study afforded a pattern and contrast of the effect of EI on leadership outcomes. Interview transcripts and case study data were coded and

analyzed using thematic analysis for the analysis of qualitative data. The results obtained for EI and leadership practices, and difficulties were compared with the two project management environments, and the key themes were identified. Manual coding and theming were done, though coding and theme generation tools like NVivo or any other similar tools could be used. Such an approach provided a more holistic view of how emotional intelligence affected the performance of the leaders in different project management approaches.

5. Results

5.1 Quantitative Findings

The comparison of Emotional Intelligence (EI) scores between Traditional and Agile Project Management (PM) reveals notable differences across four key dimensions that include, self-awareness, self-management, social awareness, and relationship management. The superiority of the mean scores of the leaders in Agile PM over those in Traditional PM was observed in all the dimensions of EI.

Table 1: Mean Emotional Intelligence (EI) Scores in Traditional vs. Agile Project Management by Dimension.

EI Dimension	Traditional PM (Mean Score)	Agile PM (Mean Score)
Self-Awareness	3.5	4.2
Self-Management	3.7	4.5
Social Awareness	3.8	4.3
Relationship Management	3.6	4.6
Overall EI Score	3.65	4.4

In particular, the Agile PM leaders achieved mean scores of 4.2, 4.5, 4.3, and 4.6 in self-awareness, self-management, social awareness, and relationship management, respectively, compared to 3.5, 3.7, 3.8, and 3.6 for Traditional PM leaders. The average EI score was 4.4 for Agile PM and 3.65 for Traditional PM, meaning that Agile PM leaders have a higher EI than their Traditional PM counterparts. The comparison of the two distributions is illustrated in Figure 1, where the self-estimated EI in Agile environments is higher, indicating the potential influence of Agile approaches on the development of the employees' EI.

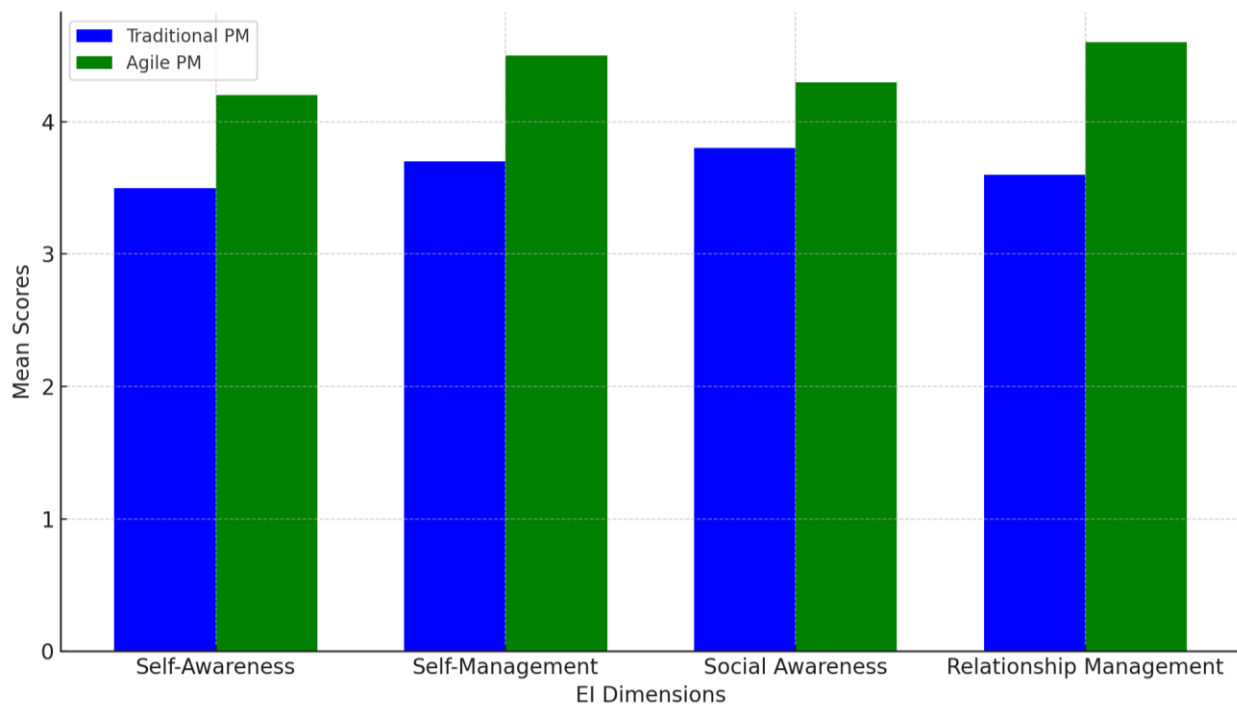


Figure 1: Average EI Scores in Traditional vs. Agile PM

5.2 Qualitative Findings

The qualitative comparison of leadership behaviors in Traditional and Agile PM pointed out probably the most crucial difference in the impact of EI on leadership outcomes. By its very nature, Agile PM requires flexibility and the ability to roll with the punches since it is an iterative system. High EI makes the leaders ready to deal with change and the level of uncertainty common in projects and helps direct others effectively through changes in project requirements. Also, problem-solving in Agile PM is mostly inclusive, and it involves the input of leaders who are willing, able, and ready to consult and resource others. This is different from the structural decision-making process that is followed in Traditional PM in which the influence of EI is not as significant as in the case of Hi-PMs. Last but not least, the organizational culture that Agile PM endorses requires more recognition of a person's social context and his/her ability to manage it. Persons with a high level of EI ensure that there is a free flow of information in their teams and they build trust and cohesiveness to drive Agile performance. While Traditional PM mostly values the process approach and technical competencies enabling EI, it is focused on different forms of leadership.

5.3 Comparison of EI in Traditional vs. Agile PM

The findings of the study suggest that EI has a higher significance to Agile Project Management (PM) than Traditional PM since Agile PM emphasizes more on flexibility and teamwork. As for communication, in Agile PM, leaders have to apply high EI to predict all the possible changes in the project environment: the creation of healthy teamwork and flexible decision-making are valued here. On the other hand, the Traditional PM model also integrates high EI but relies more on technical and process control; whereas, EI is more significant for managing and mitigating some interpersonal issues among the stakeholders.

Table 2: Percentage Contribution of EI Dimensions to Leadership Success in Traditional vs. Agile Project Management.

EI Dimension	Traditional PM (%)	Agile PM (%)
Self-Awareness	20	25
Self-Management	25	30
Social Awareness	30	20
Relationship Management	25	25

Data presented in Table 2 and Figure 2 suggests that in Agile PM leadership success is more influenced by Self-Awareness and Self-Management skills undertaking 25% and 30% respectively in comparison to traditional PM where it takes 20% and 25% respectively.

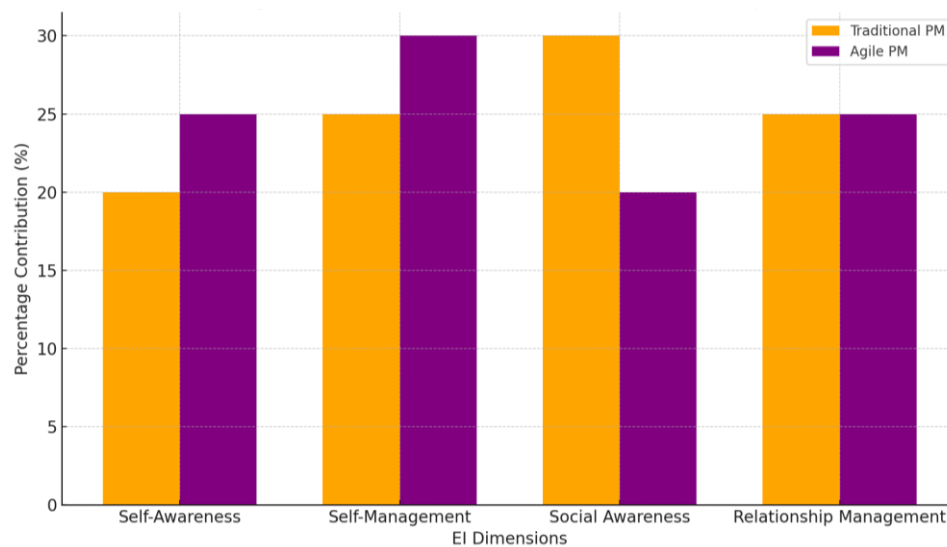


Figure 2: Percentage Contribution of EI Dimensions to Leadership Success.

In our survey, the contribution of Social Awareness in Traditional PM is higher than that of Agile PM; 30% and 20% respectively which go well with Traditional PM's organized, top-down communication style. Relationship Management was consistent with leadership success in both systems and constituted a quarter of the mix, in each PM approach.

High EI is thus crucial in Agile PM because of its focus on collaboration and iterative processes. EI self, other, and team management result in outstanding team learning, flexibility, and quick decision-making but constantly engaging and bonding at an emotional level can be tiresome. On the other hand, power tools and relationships in traditional PM still involve the use of EI about relationships, conflicts, and team motivation), but its importance is ranked lower than technical and methodological competencies. This secondary role can sometimes lead to disengaged teams in case the EI is not adequately invested in.

6. Discussion

This research study yields novel information regarding the role of EI in the effectiveness of leaders in traditional as well as Agile PM settings. The comparison reveals how EI is used in these two approaches, which is a function of the functional and organizational differences between them. In Agile PM environments, high EI is imperative because of how it operates in repetitive cycles. Persons with high EI skills are desirable in the management of the complex and unpredictable nature of Agile projects. The quantitative data supports this: the Agile PM leaders scored significantly higher on all the EI dimensions, including self-awareness, self-management, and social awareness, and relationship management than traditional PM leaders. All these higher scores indicate that the Agile PM environment requires leaders who can manage emotional issues, promote unity among the teams, and deal with a lot of changes.

The findings made from the qualitative study also back up this observation. EI is required in Agile PM due to organizational flexibility and teamwork at the core of this framework, thus enhancing teamwork and flexibility [22]. While change is iterative in nature in Agile environments, leaders are expected to navigate the associated uncertainty and direct their teams in these processes, and individuals with high levels of EI are more suited for this. This tallies with the findings of Mulder (2020) where high EI leaders were found to encourage team cohesiveness and to help in the identification of issues that affect Agile teams [23]. On the other hand, in the more conventional PM frameworks, although EI is still relevant its position is not as dominant as the technical and process management skills. The lower mean EI scores in the traditional PM leaders support this proposition. In traditional PM environments, there is a strong emphasis on the processes and control of the processes, where EI helps in the management of stakeholders and resolution of conflicts but it is not as central to the project as it is in the Agile PM [24]. The quantitative data indicate that in traditional PM, EI is related to interpersonal conflicts and team cohesion, however, the effect is not as significant as in Agile environments. In Agile PM, the EI dimensions that have more percentage contributions to leadership success are self-awareness and self-management have 55% of EI contribution as against 45% in traditional PM. Conversely, social awareness plays a more substantial part in the conventional PM as a result of the PM's more rigid communication framework. The management of relationships is still as crucial in both methodologies as it demonstrates how crucial it is in leadership no matter the PM approach.

In sum, this research highlights the contingency of EI when it comes to leadership outcomes in traditional as well as Agile PM environments. Consequently, high EI is always useful but even more conducive to Agile PM since the nature of the skills correlates with the iterative and teamwork-based approach of the methodology. In the traditional PM, technical competencies and process orientation are primary with the EI as a backup to support leadership and address social relations.

7. Conclusion

This study emphasizes the differences in the importance of EI in leadership in the context of the traditional and Agile PM environments. From the study, it can be deduced that since control, coordination, flexibility, and timely integration of multiple aspects are important in Agile PM, EI is significant here. EI not only determines the ability of a leader, but also increases team cohesiveness, interpersonal conflict-solving, ability to manage change, and, consequently, project success. This is in sharp agreement with what Agile methodology embraces in the achievement of project goals specifically embracing communication and emotions. Finally, EI is much less emphasized in traditional PM although it can be useful in relationship management and conflict resolution with the stakeholders; here process and technical content dominate. In the context of traditional PM, the emphasis is made on preserving the structure, and following a strict line of work with EI being viewed as an attachment to the main process and not as an integrated component. These two views imply that, while the current PM emphasis is on soft skills, the technical and process skills remain relevant in the conventional sense of PM. From the findings of the study, it can be inferred that organizations need to customize their leadership development initiatives to fit the requirements of the PM approach being employed. In respect of Agile environments, raising the stakes of EI can add great value to the top performance and flexibility of a team. In conventional environments, though EI is helpful, it is crucial to guarantee leaders have good process expertise too. Subsequent studies could also center on how enhancing EI training alongside technical skills affects leadership outcomes in the diverse PM frameworks.

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