

**Midocean University**

**College of Management**

**Master of Project Management**

**Impact of Leadership Style and Job Satisfaction on Project Success: The  
Mediating Role of Employee Engagement – A Field Study in Saudi Arabia**

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دراسة ميدانية في المملكة العربية السعودية**

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## **Abstract**

The success of the project is always a big thing that the organizations are interested to know before they are able to achieve some strategic goals and reach a competitive advantage. The way you manage a project and employee related factors affect the outcome of the project. The problem of this research is to examine the use of transformational leadership (TL), transactional leadership (TRL), job satisfaction (JS) as variables affecting project success (PS) with job satisfaction (JS) as the mediator. This study is based on literature of leadership and organizational behaviour that indicates that good leadership and positive employee attitudes leads to a better performance outcome. Both quantitative in nature and with structured questionnaire, 312 subjects were considered in this work. The data collected were subjected to the SPSS analysis. The tests used to determine the proposed relationships included descriptive statistics, correlation analysis, reliability analysis, factor analysis, multiple regression analysis and mediation analysis (Hayes' PROCESS Model 4). The results identified that TL has a significant positive impact on PS and has significant improvement capability on EE. JS was also seen to bring a positive impact in the domain of PS and EE. However, when it came to EE, TRL showed a less pronounced effect, and failed to significantly impact outcomes. The mediation analysis indicated that the relationships between TL and PS, as well as between JS and PS were partially mediated by EE. EE mediated the relationship between TRL and PS, however. The results showed that employee engagement is crucial as a means to leverage both leader and employee attitude for project success. The novelty of this research is to combine concepts of leadership styles, employee satisfaction, employee engagement, project success, and to test their relationships by virtue of their mediation by employee engagement in an empirical way. The results will add to the leadership/pilot management literature and offer practical suggestions to managers who want to enhance project results with attentive leadership and people-focused project management practices.

**Keywords:** Transformational Leadership, Transactional Leadership, Job Satisfaction, Employee Engagement, Project Success, Mediation Analysis, Leadership Effectiveness, Organizational Performance.

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# **CHAPTER 1: INTRODUCTION**

## **1.1. Introduction / Background of the Study**

The current competitive and quickly evolving global business environment has put organizations on the fight to ensure that they improve their project deliverables to realize strategic objectives, stay afloat and keep off competition (Lei & Slocum Jr, 2005). Projects have been the most common way by which organizations bring change, provide value, as well as react to unstable market dynamics. In this regard, this has been a critical area of interest among researchers and practitioners to understand the factors that undertake project success (Lei & Slocum Jr, 2005). Out of all these, leadership style, job satisfaction, and employee engagement have been highly identified as major determinants, which contribute to the effectiveness with which projects can be completed and executed. Leadership takes center stage in determining the organizational behaviour and the performance of employees. Various styles of leadership may have different influence on the motivation and attitude of the employees and their general productivity. Leaders in project environments also have the role of guiding teams, decision making, conflict resolution and ensuring that project objectives are met within a limited environment which includes time, cost and quality. Positive organizational outcomes have been attributed to transformational leadership which is more focused on inspiration, vision, and individual growth (Al Najjar & Qandeel, 2025).

Leaders embracing this style are likely to motivate employees by making them feel a sense of purpose and become innovative. Transformational leadership on the other hand is based on planned work, rewards and monitoring of performance (Gupta, 2025). Although this is a more control oriented style, it can also help in making a project successful in scenarios where there are clear expectations and accountability. It is crucial to comprehend the impact of these leadership styles on project results when determining effective management practices. In conjunction with leadership, job satisfaction is another key element that influences the performance and success of an organization. Job satisfaction denotes the measure by which workers are happy and satisfied with their employment tasks, working conditions, wages and rewards (Bindel Sibassaha et al., 2025). When employees feel content with their employment, then they have a higher chance of exhibiting better degrees of commitment, productivity and loyalty to their organisation. Satisfied workers are willing to render in the project environment in better ways and cooperate in a group as well as work hard and stay committed to attain the

project objectives (Warsi & Shaiq, 2025). On the other hand, dissatisfaction with the job may cause low levels of motivation, increased turnover rates and low efficiency of projects and this is likely to impact project success. Another aspect of organizational behaviour that has cropped up as a serious construct is employee engagement. It is defined as the emotional, cognitive and behavioural attachment between the employees and their work and organization. Engaged employees tend to be more motivated, committed and ready to do more than those job duties and responsibilities. They are more active and concerned with the achievement of organizational goals. Employee engagement is especially significant in project environments since projects can easily be group work, flexible, and demand long-term effort. Employees who are engaged will be more productive in innovating ideas, persistence when under pressure and cooperate with other employees, hence improving the performance of the whole project. The relationship between the leadership styles, job satisfaction, employee engagement and project success are some of the interrelationships that have gradually attracted considerable attention among researchers in recent years.

There is a general cultural belief that leadership styles and job satisfaction do not impact on project success as such but tend to work via mediating factors like employee engagement (Waseem et al., 2025). It implies that the level of engagement can be initially influenced by leadership practices and employee attitudes and subsequently, these characteristics affect the project outcomes. As an illustration, a transformational leader can help boost his or her staff by developing trust, recognition, and motivation, which in turn will result in high project performance. On the same note, job satisfaction can also contribute to the enhancement of employee engagement leading to more successful input into project success. Saudi Arabia is a country with particularly suitable setting to this study. Within recent years, Saudi Arabia has noticeable developed economically and in terms of organization through initiatives like Vision 2030 (Ahmed et al., 2025). This revolution has seen the rise of investment in massive infrastructural, technological and development projects both in the state and in the private sectors. This has increased the need to have effective project management practices significantly. Organizational performance in Saudi Arabia is improvising in terms of leadership effectiveness, employee well-being and engagement of the workforce to guarantee successful execution of projects.

Nevertheless, with this increased significance, empirical studies that investigate the interaction effect between leadership styles and job satisfaction with employee engagement in terms of

project success in the Saudi Arabian setting are still at their infancy. Furthermore, in Saudi Arabia, employee behaviour might be influenced by cultural, organizational, and environmental forces in a different manner as in Western workplace where the majority of the existing studies have taken place (Aldhobaib, 2025). Organizational hierarchy, communication patterns, and work culture are some of the factors that can shape the perceptions of employees with regard to leadership and job satisfaction. Thus, this study is not only essential to fill a geographical research gap but also a way of advancing towards a wide scope of understanding of the functioning of these variables in a non-Western environment. On the whole, the study is aimed at discussing the relationship between the styles of leaders and job satisfaction and project success with an intermediary variable of employee engagement. Analysing these relations and focusing on the Saudi Arabia context, the research will offer great value to project managers, organizational leaders and policymakers. The results will be used to guide organizations to create better leadership practices, employee satisfaction, higher levels of employee engagement, and eventually a more successful project in a more competitive world.

## **1.2. Research Problem Statement**

Although project management has gained great significance in meeting organizational objectives, most projects keep being marred by delays, highest costs, quality problems and even failure altogether (Okei, 2025). Among the major factors contributing to these hurdles is the human factor especially employees are directed, their satisfaction with their employment, and level of engagement to their work (Bannor et al., 2026). Although technical elements of project management like planning, scheduling and budgeting are fully established, the behavioural and organisational aspect which impact the success of the project are yet to be well comprehended, particularly in emerging and fast developing economies such as Saudi Arabia. Leadership practices in most organizations are not the same and not every leadership style has the same results. Other leaders may use transformational style, which inspires and motivates people in the workplace, and others are more transactional, rule governed, rewards oriented and compliance-driven (OFENIMU, 2025). Nevertheless, it is not clearer which style of leadership can be more effective to achieve project success in Saudi Arabian situation where organization culture, hierarchy, and diversity of workforce can impact differently on the effectiveness of different leadership styles as in Western contexts. Although the body of research regarding leadership and job satisfaction is large, there is still a serious gap in comprehending how the two variables interactively affect the success of the project, and, in

particular, the employee engagement (Kauppila, 2025). Leadership development and employee satisfaction programs are often heavily invested in by many organizations and however, they often fail to achieve their goals because there is lack of congruency between management strategies and employee motivation (Bukhari et al., 2025). The traditional research has focused either on leadership styles, job satisfaction or engagement independently, without paying much attention to the dynamics that are intertwined to promote or inhibit project outcomes (Nechouani & Machrafi, 2025).

The transformational leadership style and transactional leadership style can have different effects to the motivation and the performance of the team (Sheena et al., 2025). It is believed that transformational leadership can improve creativity and discretionary effort but on the other hand transactional leadership can be used to ensure clarity, discipline and adherence to the goals (Salameh-Ayanian et al., 2025). At the same time, the levels of engagement could be influenced by the job satisfaction of employees, who would be more committed to the tasks of the project and be willing to go extra mile. Nevertheless, the mediating effect of employee engagement is underresearched, which restricts the possibility of managers to apply evidence-based practices that can lead to high morale and efficiency of the projects.

The gap is specifically applicable in industries that are based on projects and where the inability to maximize human capital could lead to cost increase, deadline slippage, and dissatisfaction among stakeholders. The interaction between leadership styles and job satisfaction along with the mediating role of engagement is the key to organizations that seek to enhance the results of a project in an organized manner. A solution to such an issue does not only advance the field of leadership and project management but also provides a realistic base of building self-motivated and engaged teams, which are in a position to attain sustainable project success.

### **1.3. Significance of the Study**

This work is noteworthy due to the fact that it will not only be included in academic literature but also applied knowledge on how leadership types and job satisfaction contribute to the success of a project via employee engagement levels (Quick, 2026). Considering the growing trend toward the use of project-based jobs in institutions, particularly, developing economies like Saudi Arabia, it is imperative to determine the human-based variables that promote project success with a view of enhancing organizational performance and attaining strategic objectives. Academically, this study is valuable because it combines four valuable constructs, which

include leadership styles, job satisfaction, employee engagement and project success, under one conceptual framework. Though past literature has looked into these variables individually or even in partial connections, there are few research works which has entertained the same variables into a thorough model especially in the Saudi Arabian context. In this way, the given study contributes to sealing a significant information gap in the existing literature and offers a more comprehensive perspective at the interaction between leadership and factors that affect employees to influence the project outcomes. It also helps in the formulation of organizational behaviour and project management theories by looking into how employee engagement mediates in the same. Practically, the results of this study will be beneficial to the project managers, organizational heads and policy makers. Concepts of the way leadership styles, in terms of employee satisfaction and engagement, influence the performance of the specified processes can assist leaders in obtaining the ability to use a more efficient management strategy to have their teams reach superior results.

Likewise, knowledge of job satisfaction role can help organizations to enhance the workplace conditions, motivation strategy and employee retention. The findings can be used by organizations to stipulate interventions that will raise work engagement levels and enhance the overall project efficiency since engaged workers are more likely to contribute to project success. The importance of the research is even greater in the settings of Saudi Arabia, where massive transformation initiatives are currently implemented according to the Vision 2030. Both the government and the business world are in dire need of organizations that can provide successful project results in an efficient and effective manner. The at least evidence-based work through this research could be used to help these organizations improve leadership practices and better human resource strategies to attain more positive project results. As a whole, the research is important as it helps to close the gap between theory and practice by providing adequate contributions that may boost the academic knowledge and the success of the project in the real world.

#### **1.4. Research Aim**

This research paper set out to explore how the leadership styles (transformational and transactional) and job satisfaction influence the success of a project with special attention to examining the mediating role that employee engagement would play in the case of Saudi Arabian based organizations.

### **1.5. Research Objectives**

1. To examine the impact of transformational leadership on project success.
2. To assess the effect of transactional leadership on project success.
3. To evaluate the influence of job satisfaction on project success.
4. To investigate the role of employee engagement as a mediator between leadership styles and project success.
5. To explore the mediating effect of employee engagement between job satisfaction and project success.

### **1.6. Research Questions**

1. How does transformational leadership affect project success?
2. How does transactional leadership influence project success?
3. What is the impact of job satisfaction on project success?
4. Does employee engagement mediate the relationship between leadership styles (transformational and transactional) and project success?
5. Does employee engagement mediate the relationship between job satisfaction and project success?

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. Chapter Introduction**

The literature review chapter is a result of the profound analysis of the available theoretical and empirical research in the sphere of leadership styles, job satisfaction, employee engagement and project success. It is the basis of the current study in that it establishes the important concepts on the issue, describes the theories involved, and draws connections between factors that have been studied previously in the literature. This chapter also assists in situating the current study in the context of rest of the known literature in the area of organizational behaviour and project management studies. In contemporary organizations, particularly organizations that are placed in project-oriented settings, technical planning and financial resources do not dictate the success of one task, but rather human and behavioural measures are some of the factors that can be used to determine the success of a project. The style of leadership is very critical in the attitude, motivation and performance of the employees, which ultimately defines the project results. In the same regard, job satisfaction is well known to be a critical determinant of employee behaviour which influences their productivity, commitment and their expectations of offering contributions to organizational objectives. The concept of employee engagement has also been in the spotlight during the past few years as an important psychological condition that indicates the degree to which, employees are connected to and engaged with their work and organization.

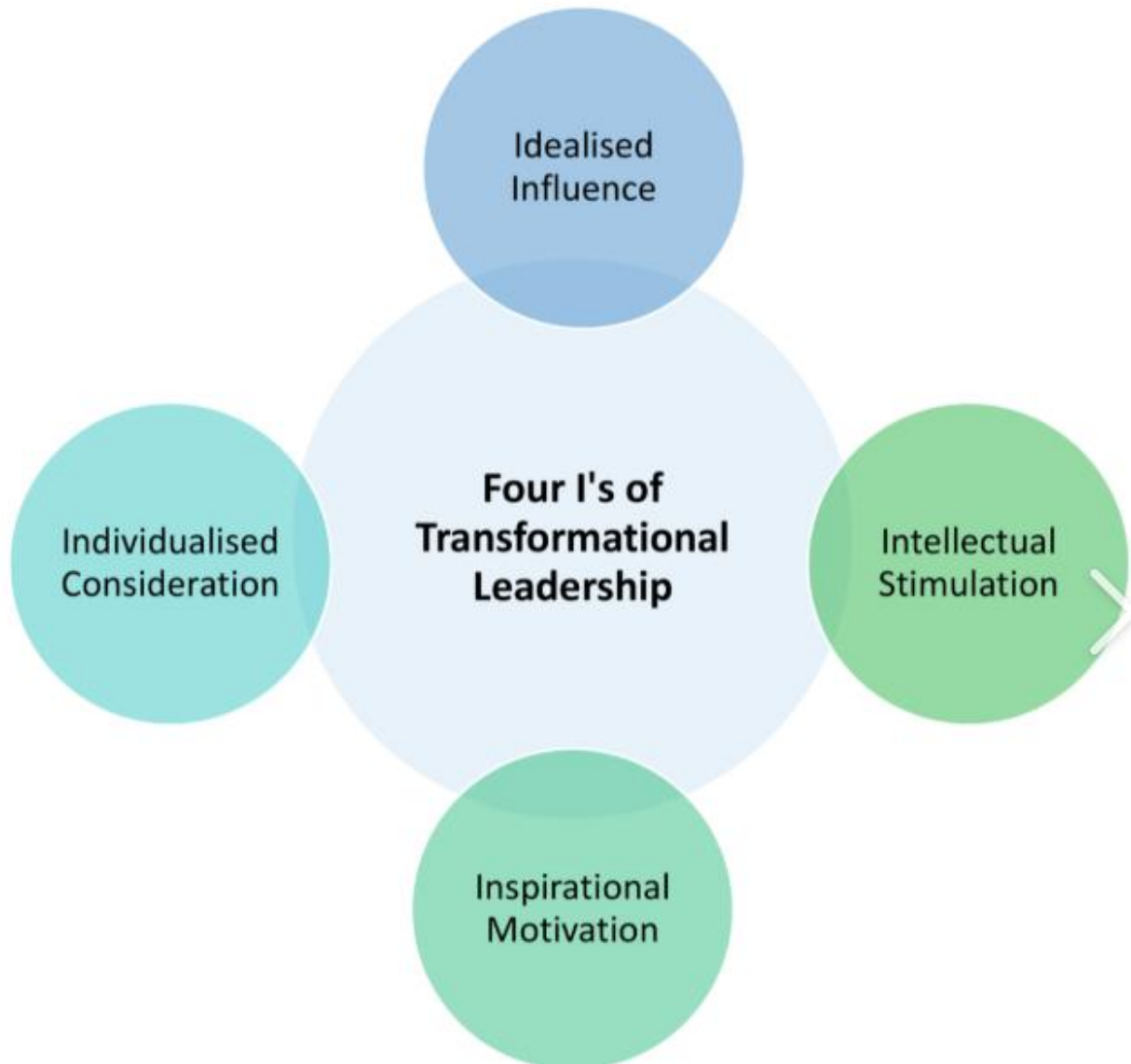
These variables are interlocked and may make a tremendous difference to the success of the project. This chapter aims at critically reviewing and synthesizing the past researches on these variables with an aim of coming up with a solid theoretical base in the current research. It starts with the discussion of theories which are relevant and explain leadership behaviour, motivation of employees and the performance of an organization. The theories present the conceptual frame that the relationships between the study variables are interpreted. After this, all the variables are discussed separately, according to the current literature, transformational leadership, transactional leadership, job satisfaction, employee engagement, and project success. Moreover, the chapter discusses the interrelation between the variables by examining the literature that has examined their direct and indirect impacts. Employee engagement as the mediating variable is given special attention because it is viewed as an essential mechanism

where the leadership styles and job satisfaction can determine the success of the project. Through these relationships, the study will be able to make patterns, contradictions and gaps in the existing literature. Lastly, the chapter draws an end by identifying the research gap which justifies the existence of the present study.

Although there is an increasing research relating to the topic of leadership and employee behaviour, there are a few studies which combined all four variables in the same structure especially when it comes to Saudi Arabia. This gap is an indicator of the significance of additional research to help comprehend the interaction of such variables on the success of projects. In general, the chapter of a literature review offers a well-organized and critical examination of existing knowledge, which does not only highlight the research framework development, but also shapes a methodological approach and hypothesis formulation of the study.

## **2.2. Theoretical Framework**

This theoretical framework is constructed based on various established theories in the organizational behaviour and management on how leadership styles, job satisfaction, employee engagement and project success are interrelated. These theories are a systematic basis on the knowledge of the relationships among the variables and hold the conceptual model applied in this study. Transformational Leadership Theory, which was introduced by Burns (1978) and expanded by Bass (1985) is one of the major theories upon which this research was based (Bass, 2015). This theory describes how leaders improve motivation and inspiration to the employees through the development of shared vision, promoting innovation and attending to individual needs. It is a characteristic of transformational leaders to increase the level of employee motivation and performance through the establishment of trust, intellectual stimulation, and emotion (Korejan & Shahbazi, 2016). As per this research, transformational leadership is supposed to have a positive impact on employee engagement and job satisfaction, which consequently lead to success in the project.



**Figure 2-1: Transformational Leadership**

Conversely, the fact that the theory of Transactional Leadership also contributes to a major role in this research framework. This theory lays emphasis on systematic work, conceptualized roles, and reward systems of motivation (Lai, 2011). Transactional leaders lead employees by means of set guidelines and performance standards, rewarding employees who succeed in meeting the standards and punishing those who do not fulfil the standards. Although this is more of a control-oriented leadership style, it remains useful in the achievement of completion of a task as well as ensuring organizational discipline. In the project setups, the transactional leadership could result in project success by instilling clarifications, accountability, and consistency in performance. The second theoretical framework that is critical is the Two-Factor Theory of Motivation by Herzberg. This theory has a differentiation between hygiene factors

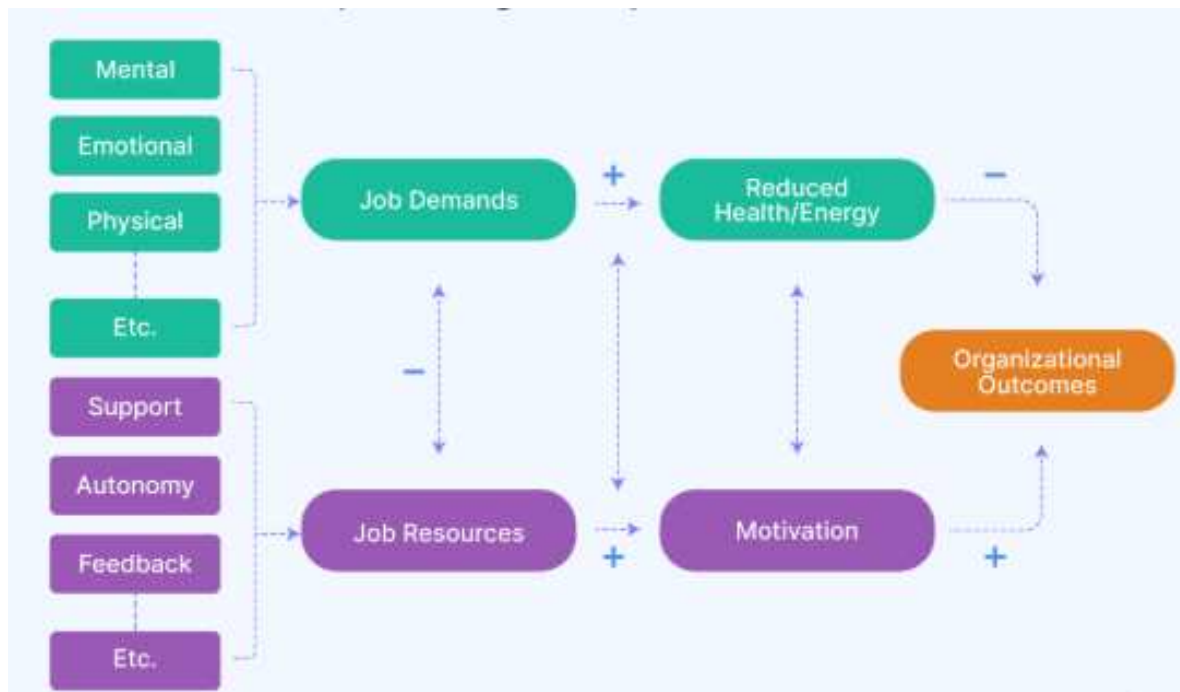
(salary, working conditions, policies) and motivators (recognition, achievement, and responsibility). Herzberg argued that fails to satisfy employees with motivators and that poor hygiene factors were the root cause of a lack of job satisfaction. The study takes the concept of job satisfaction as a major factor that determine employee behaviour and anticipates that it will have an impact on employee engagement and eventual project success. Also, Social Exchange Theory furnishes a very significant explanation of how among the study variables. According to this theory, the relations between employees and organizations are grounded on mutual exchanges. When workers feel supported leadership and treated well, they will tend to reciprocate this attitude in terms of increased engagement and commitment. As such, job satisfaction and leadership styles can be regarded as organizational inputs that modulate employee engagement as a two-way feedback, that subsequently impacts on performance outcomes like project success.



**Figure 2-2: Herzberg two-factor theory**

Moreover, Job Demands Resources (JD-R) Model can be also applied to the research (Bakker & Demerouti, 2007). This model hypothesizes that job demands and job resources affect the level of employee engagement. The leadership support and job satisfaction may be regarded as significant job resources which may decrease the levels of stress and increase motivation. Workers are more capable of being engaged in their job when the needs are met, which will result in better performance and project success. Through the combination of the theories, theoretical foundation of this research will enable the formulation of a holistic knowledge on the impact of leadership styles and job satisfaction on employee engagement and project

success. The explanations of the behaviour of the leader are the transformational theory of leadership and the transactional theory of leadership, the theory of job satisfaction elucidated by Herzberg, the theory of relational dynamics elucidated by the Social Exchange Theory, and the theory of engagement mechanisms explained by the JD-R model. Collectively, these theories create a solid underpinning to analyse the interrelationships between the variables and back the conceptual model of this study.



**Figure 2-3: Job Demand-Resources framework**

## **2.3. Individual Variables**

### **2.3.1. Leadership Styles (Transformational & Transactional Leadership)**

One of the most significant factors concerning the organizational performance and the project success is leadership (Ismail et al., 2010). Leadership style is a critical factor that influences the behaviour, motivation, and productivity of employees in project-based settings, where employees need to coordinate, work as a team, and make decisions on time. Some of the leadership styles found in the literature include transformational and transactional leadership; however these are most popular in organizational studies and practice since they have been found to have a major impact on employees and organizational success (Purwanto et al., 2020). Transformational leadership is a type of leadership based on inspiration and motivating

employees to perform beyond the expected performance levels which was introduced by Burns (1978) and developed by Bass (1985). Transformational leaders give a strong vision of future and motivates employees to pursue personal goals towards the organizational goals. They do this through exhibiting tolerance, offering intellectual stimulation, individualized attention as well as inspirational motivation (Crews et al., 2019). These leaders do not just concentrate on the accomplishment of tasks but also on developing employees, innovativeness, and growing them in the long run. It has always been found that transformational leadership is beneficial to employee attitudes and behaviour. Workers who work under transformational leaders are likely to have a stronger motivation, commitment, and job satisfaction levels. The leadership style also increases the participation of employees by making them feel a sense of purpose and inclusion in the organization. Transformational leadership is effectively used in project setups since it fosters innovation, flexibility, and teamwork; these are all needed to handle complex and dynamic projects (Avci, 2015). Consequently, transformational leadership has been linked with better project deliverables such as quality products, delivery on time and satisfaction by the stakeholders. In contrast transactional leadership is a more organized and business-driven leadership approach. It is a style that is founded on specific roles, duties, and performance expectations. Transactional leaders tend to ensure the performance of employees is monitored, rewards are given when targets are achieved and then corrective measures are taken when performance is under performing.

Transactional leadership is based on a process of exchanges wherein compliance is rewarded, and non-compliance is punished (Mekonnen & Bayissa, 2023). This is a type of leadership that focuses on efficiency, control and short term goal attainment. Even though transactional leadership has been considered to be less inspirational than transformational leadership, it should not be deemed as unimportant to an organizational setting, especially in surroundings where tasks are routine based, organized and procedures must be followed to the letter. Transactional leadership in project management is useful in ensuring timely completion of task, appropriate use of resources, as well as adherence to project guidelines (Dartey-Baah et al., 2024). It offers clarity and organization that can help minimize uncertainty and enhance efficiency in operations. The success of transactional leadership, however, in improving employee engagement and job satisfaction is widely believed to be less effective than transformational leadership. Although it can enhance performance by use of extrinsic rewards and penalties, it may not always lead to high intrinsic motivation and commitment. Workers can be in line with all requirements but not have an emotional attachment to their job and their

company. Transformational and transactional leadership styles are deemed to be significant predictors of success in a project in the context of this study (Klein, 2023). The positive impact of transformational leadership on employee engagement and job satisfaction should be greater with respect to its motivational and developmental orientation. On the other hand, transactional leadership is supposed to help in enhancing project success by ensuring a structure, control, and monitoring of performance. These two leadership styles are vital to this research as they are two different and yet complementary methods of employee management. Their role in employee engagement and job satisfaction is an important study to the impact of leadership behaviour on project results in an organizational context, especially in the dynamic business environment in Saudi Arabia.

### **2.3.2. Job Satisfaction**

Job satisfaction is an important term in organizational behaviour indicating the degree to which employees are satisfied with their jobs, roles and overall workspace (Hartika et al., 2023). It is mostly described as the degree of emotional satisfaction that an individual feels about their job, which is determined by considering the aspects of job nature like remuneration, the working experiences, the supervisors, the acknowledgment and development of their career, and relations with other employees. Within the framework of project-based organizations, job satisfaction is a critical element of evaluating the performance of employees, their motivation, as well as commitment to organizational objectives in the long term (Aziri, 2011). The significance of job satisfaction has become well known in the literature of management since it is a factor that directly impacts the energy and outcomes of the organization, through the behaviour of the employees. Contented employees will be more productively, committed and will be willing to do more than what is required of them in the line of duty. They are also more likely to exhibit a greater degree of loyalty and will not tend to abandon the organization especially in projects where continuity and team work is the key to success. Conversely, we may be faced with low job satisfaction which result in decreased engagement, absenteeism, turnover and decreased productivity all negatively impacting on the project. There are a number of drivers of job satisfaction (Mishra, 2013). These are intrinsic ones which are recognition, achievement, responsibility and opportunities of personal growth and extrinsic which are salary, work condition, organizational policy and quality of supervision. The Two-Factor Theory by Herzberg, intrinsic factors influence job satisfaction and lack of hygiene factors leads to dissatisfaction. In project settings, the factors mentioned in both groups matter since

the employees have to have relevant resources and favourable conditions, and they have to have meaningful and challenging work to feel satisfied. Jobs satisfaction is also closely associate with leadership style. Support, recognition, and a clear vision can boost job satisfaction in a substantial way enabled by effective leaders who may be transformational in nature. Employees will be more inclined to a certain degree of satisfaction in case they feel that they are appreciated and supported by their leaders.

On the same note, clear expectations and fair reward systems that accompany transactional leadership can also help lead to job satisfaction even though they might not bring with them the same effect as transformational leadership. Job satisfaction is assumed to be an important predictor of project success in this study (Zhu, 2012). Happy workers have an increased chance of being engaged, motivated and dedicated towards meeting project objectives. They are also better placed to work with their team members effectively, resolve problems quickly and remain positive despite the pressure. Thus, job satisfaction will have a significant contribution in the increased employee engagement that subsequently leads to the better results of the project. All in all, job satisfaction is an important psychological condition that mediates between employee attitudes and performance in organization (Hamermesh, 1999). It is a critical variable in explaining the presence of human factors in the successful implementation of a project because it plays a crucial role in the engagement and success of employees in projects.

### **2.3.3. Employee Engagement**

Employee engagement is a crucial concept in the contemporary organizational behaviour, which means the degree of emotion, mental, and act engagement of a worker towards his/her work and his/her organization (Kwon et al., 2024). Engaged employees refer to employees who are deeply engaged in their jobs, are passionate about their work and ready to go out of their way to help the organization shine. In comparison to, simple job satisfaction which is concerned with how the employees feel about their job, employee engagement is concerned with how committed and proactive employees are about executing their duties (Al Zeer et al., 2023). Within the past few years, employee engagement has been receiving an immense amount of attention because it is closely linked to the performance and productivity of organizations. Studies indicate that the more engaged the employees, the more innovative, productive, and the more loyal they are to the company. They are much more energetic, committed and absorbed in their work. Employee engagement is even more crucial in project

based settings, where teamwork, flexibility, and problem solving are paramount to the project success. There are various drivers of employee engagement which are leadership style, job satisfaction, organizational culture and work environment (Pincus, 2023). The role of leadership is especially significant since the involvement of supportive and inspirational leaders may greatly boost the level of engagement among the employees.

As an example, transformational leadership promotes engagement through motivating employees, offering a clear vision, and promoting individual growth. Job satisfaction, in a similar manner, also leads to engagement, through a positive emotional state which makes employees motivated to engage more in their work. The Job Demands-Resources (JD-R) model can assist in understanding employee engagement (Chuang & Huang, 2025). This model suggests that the level of engagement depends on the interplay between job demands and job resources. Positive work factors like supportive leadership, recognition, autonomy and job satisfaction decrease the level of stress and elevate motivation which results in increased engagement (Dhaneesh et al., 2025). With adequate resources, the employees will tend to be energized and dedicated to their work. The mediating variable, in the context of this study, is employee engagement that links leadership styles and job satisfaction to project success. It implies that the impact of leadership styles and job satisfaction on the results of the project will be indirectly mediated by ensuring that employee engagement will be affected at first (Montenegro Méndez et al., 2025). An engaged employee has increased chances of performing well, working effectively and staying cohesive to the project objectives which translates to delivering successful projects. Thus, employee engagement becomes a very important consideration when it comes to comprehending the performance of an organization. It is not only a measure of what employees feel about their job, but also what efforts they make towards spearheading organizational goals. The fact that it mediated in this research shows how it is significant in revealing how leadership and job satisfaction can be translated into better project success.

#### **2.3.4. Project Success**

Project success is a multidimensional concept that is used to indicate the successful delivery of a project within set limits in terms of time, cost, quality, and scope as well as the delivery of stakeholder satisfaction and attainment of organizational outcomes (Abbas & Ali, 2023). Success in modern project management is defined not by some of the classic measures of a project on time and on budget accomplishment, but also by additional measures like, customer

satisfaction, team performance, long-term benefits and strategic alignment. This broadened concept of project success indicates the growing complexity of projects in the dynamic business world (Loderer & Kock, 2025).

Conventionally, the iron triangle of project management, in terms of time, cost, and quality were employed as the main gauge of project success. Project was considered successful when it was completed in the given time frame, maintained a fixed budget as well as passed the necessary standards of quality (Almashhadani & Almashhadani, 2023). Nevertheless, scholars have stated that this has been too limited in explanation of the worth of a project. Consequently, new dimensions of project success like stakeholder satisfaction, user acceptance, business impact, and sustainability of results can be regarded as some of the aspects that enrich the contemporary understanding of success in projects (Eyieyien et al., 2024). Technical, organizational and human factors combine to determine organizational success in projects. Although technical elements of planning, risk management and allocation of resources are crucial, human elements of leadership, communication, motivation and employee engagement are also crucial. The execution of projects is by a team of individuals, whose performance, behaviour and commitment are some of the direct determinants of the success of the entire project. Leadership assumes a special role in defining project success whereby, project managers have the role of leading teams, conflict resolution, as well as, coordination amongst the stakeholders.

The capacity to lead effectively can aid in developing a clear vision, keeping the team members motivated, and achieving the project goals. On the same note, the attitude of employees including job satisfaction, and engagement greatly determine the effectiveness of people in contributing to project tasks (Imron & Choiruddin, 2025). Employees who are happy and engaged will tend to be productive, team players and motivated to deliver quality results. Project success is particularly associated with the employee engagement since engaged employees are more likely to do more than their designated job roles. They are pro-active, self-solving, and remain energetic even when faced by a crisis. This is especially needed in the project environment where unexpected issues and deadlines are the norm. Such high engagement leads to improved teamwork, communication and problem solving all of which are vital to successful project delivery (Majeed et al., 2026). Within the framework of this research, the project success is deemed as the final dependent variable, having an influence on project success via leadership styles and job satisfaction, both directly and indirectly through

employee engagement. It implies that achievement of successful projects is not merely a result of effective planning and implementing it but also is greatly influenced by the manner leaders lead employees, how content they are with their job, and how interested they are in what they do. In general, project success is a holistic evaluation of the organizational effectiveness within the project-based environment (Dhaneesh et al., 2025). The insights of causes that define it are would be necessary in enhancing the way projects should be handled and in facilitating successful execution of projects especially in the fast developing environment like Saudi Arabia.

**Table 2-1: Literature Review Matrix**

| <b>Author(s) &amp; Year</b> | <b>Research Focus</b>                              | <b>Methodology</b>     | <b>Key Findings</b>                                                                                         | <b>Research Gap</b>                                              |
|-----------------------------|----------------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Burns (1978)                | Development of transformational leadership concept | Conceptual/Theoretical | Introduced transformational leadership as a leadership style that motivates followers beyond self-interest. | Did not examine project success or employee engagement.          |
| Bass (1985)                 | Expansion of transformational leadership theory    | Conceptual/Theoretical | Established dimensions of transformational leadership including inspiration and intellectual stimulation.   | Lacked empirical evidence regarding project-based organizations. |
| Ismail et al.               | Leadership and organizational performance          | Quantitative           | Leadership significantly influences organizational performance                                              | Limited focus on project success and mediation mechanisms.       |

|                      |                                                             |                   |                                                                                                  |                                                                 |
|----------------------|-------------------------------------------------------------|-------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
|                      |                                                             |                   | and employee outcomes.                                                                           |                                                                 |
| Avci                 | Transformational leadership in project settings             | Quantitative      | Transformational leadership promotes teamwork, innovation, and flexibility in projects.          | Employee engagement was not examined as a mediator.             |
| Crews et al.         | Components of transformational leadership                   | Literature Review | Individualized consideration and inspirational motivation improve employee attitudes.            | Did not investigate project success outcomes.                   |
| Purwanto et al.      | Comparison of transformational and transactional leadership | Quantitative      | Both leadership styles affect organizational effectiveness.                                      | Limited examination of employee engagement mechanisms.          |
| Mekonnen and Bayissa | Transactional leadership effectiveness                      | Quantitative      | Transactional leadership improves compliance and task performance through rewards and sanctions. | Insufficient evidence regarding engagement and project success. |
| Dartey-Baah et al.   | Transactional leadership in                                 | Quantitative      | Transactional leadership                                                                         | Did not explore                                                 |

|           |                                               |                   |                                                                            |                                                     |
|-----------|-----------------------------------------------|-------------------|----------------------------------------------------------------------------|-----------------------------------------------------|
|           | project management                            |                   | ensures efficiency, resource control, and timely completion.               | mediating psychological variables.                  |
| Klein     | Leadership styles and project success         | Quantitative      | Leadership styles significantly contribute to successful project outcomes. | Mediation of employee engagement not investigated.  |
| Aziri     | Job satisfaction determinants                 | Literature Review | Job satisfaction affects productivity, commitment, and retention.          | No focus on project success.                        |
| Mishra    | Factors affecting job satisfaction            | Conceptual        | Both intrinsic and extrinsic factors determine job satisfaction.           | Did not investigate engagement or project outcomes. |
| Zhu       | Job satisfaction and performance outcomes     | Quantitative      | Satisfied employees demonstrate higher performance levels.                 | Limited understanding of mediating variables.       |
| Hamermesh | Job satisfaction and organizational behaviour | Quantitative      | Job satisfaction is a major predictor of                                   | No project-based context examined.                  |

|                          |                                                 |                   |                                                                                      |                                                                  |
|--------------------------|-------------------------------------------------|-------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------|
|                          |                                                 |                   | employee performance.                                                                |                                                                  |
| Kwon et al.              | Employee engagement and organizational outcomes | Quantitative      | Engaged employees exhibit higher productivity and commitment.                        | Did not integrate leadership and project success simultaneously. |
| Al Zeer et al.           | Nature of employee engagement                   | Quantitative      | Employee engagement extends beyond job satisfaction and reflects commitment to work. | Lack of project management context.                              |
| Pincus                   | Drivers of employee engagement                  | Literature Review | Leadership, work environment, and organizational culture influence engagement.       | Project success outcomes were not examined.                      |
| Chuang and Huang         | Job Demands-Resources model and engagement      | Quantitative      | Adequate resources increase engagement and motivation.                               | Limited application in project-based organizations.              |
| Montenegro Méndez et al. | Mediating role of engagement                    | Quantitative      | Employee engagement explains how workplace                                           | Leadership styles and project success not                        |

|                               |                                            |                   |                                                                                |                                                              |
|-------------------------------|--------------------------------------------|-------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------|
|                               |                                            |                   | factors influence performance.                                                 | simultaneously tested.                                       |
| Abbas and Ali                 | Determinants of project success            | Quantitative      | Project success depends on both technical and human factors.                   | Did not focus on leadership and employee attitudes together. |
| Almashhadani and Almashhadani | Traditional measures of project success    | Conceptual        | Time, cost, and quality remain core indicators of project success.             | Broader behavioural factors not fully explored.              |
| Eyieyien et al.               | Expanded dimensions of project success     | Literature Review | Stakeholder satisfaction and strategic benefits are critical project outcomes. | Leadership and engagement relationships not investigated.    |
| Imron and Choiruddin          | Employee attitudes and project performance | Quantitative      | Employee satisfaction and engagement positively affect project outcomes.       | Combined model involving leadership styles remains limited.  |
| Majeed et al.                 | Employee engagement and project delivery   | Quantitative      | Engagement improves teamwork, communication, and project delivery.             | Need for integrated mediation models.                        |

|                 |                                  |              |                                                                      |                                                            |
|-----------------|----------------------------------|--------------|----------------------------------------------------------------------|------------------------------------------------------------|
| Dhaneesh et al. | Human factors in project success | Quantitative | Leadership and engagement are major determinants of project success. | Evidence from Saudi Arabian organizations remains limited. |
|-----------------|----------------------------------|--------------|----------------------------------------------------------------------|------------------------------------------------------------|

## 2.4. Relational Literature

### 2.4.1 Leadership Styles and Project Success

Leadership styles and project success have been widely studied in the literatures in organizational management and project management still results have varied and circumstances specific (Raziq et al., 2018). It is a well acknowledged fact that leadership is key success factor in projects since the project manager is tasked with responsibility of team co-ordinating and resource allocation, conflict management and ensuring project goals or objectives are met within the constraints (Ansari et al., 2024). Nonetheless, the role of various leadership styles to the success of a project differs remarkably across the studies, and this suggests that it should be critically analysed further, especially in third engine and transitional economies like Saudi Arabia. Transformational leadership has been typically linked to successful projects. Many studies indicate that transformational leaders are able to make projects more successful through motivation of the employees, encouraging innovation, and creating a robust team unification (Aga, 2016). Transformational leaders can assist employees to align their individual goals to that of the organization by developing a common vision and facilitating intrinsic motivation (Fareed et al., 2022). This congruency enhances commitment, imagination, and malleability that are necessary in dealing with complex and uncertain project environments. But, certain literature claims that the effectiveness of this transformational leadership can be over-rated, as organizational culture, team maturity, and industry type can determine its impact. Conversely, transactional leadership is also associated with project success especially in formalized and routine project set-ups. Transactional leaders provide the completion of tasks in a way that is based on prescribed standards by way of reward and punishment (Nauman et al., 2022). This would work well in the sense that it keeps discipline, clarity and performance management within the required deadlines, budget limits.

Nevertheless, it has also been found that transactional leadership can be less effective in terms of long term motivation, innovation and employee engagement, which are becoming more of a focus in the project environment of today.

One of the main gaps that there is in the literature is that the literature does not agree on which type of leadership proves to be more effective when it comes to project success. A lot of research is conducted on transformational and transactional leadership in isolation or even comparing them without taking into account the joint or situation effect (Afzal & Tumpa, 2024). Also, the bulk of empirical studies is based on the Western setting, in which the organizational culture, leadership and workforce relationships vary widely as compared to Middle East states like Saudi Arabia. The other notable constraint of the research body is the lack of investigations on indirect processes of how leadership affects success of a project. Although leadership is commonly believed to have a direct influence, there is less research on the psychological and behavioural mediators like employee engagement to support this outcome. This leaves an open gap in comprehending the underlying processes by which leadership styles have a translation of project outcomes (Ellahi et al., 2022). Thus, this paper will fill these gaps by exploring two leadership approaches, namely, transformational and transactional, and exploring them concurrently and evaluating their direct and indirect impact on project success based on employee engagement in the Saudi Arabian setting. This method will offer a deeper and situational insight into the role of leadership in the success of projects.

**Table 2-2: Literature Matrix on Leadership Styles and Project Success**

| <b>Author(s)<br/>&amp; Year</b> | <b>Research Focus</b>                                      | <b>Methodology</b>              | <b>Key Findings</b>                                                                                              | <b>Research Gap<br/>Identified</b>                                     |
|---------------------------------|------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Raziq et al.                    | Relationship between leadership styles and project success | Quantitative survey-based study | Leadership styles significantly influence project outcomes; effectiveness varies across organizational contexts. | Limited examination of mediating mechanisms and contextual influences. |

|                 |                                                                           |                                   |                                                                                                                                          |                                                                             |
|-----------------|---------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Ansari et al.   | Role of leadership in project management                                  | Quantitative research             | Effective leadership is critical for team coordination, conflict management, resource allocation, and achievement of project objectives. | Did not compare multiple leadership styles simultaneously.                  |
| Aga             | Impact of transformational leadership on project success                  | Quantitative analysis             | Transformational leadership positively affects project success through motivation, innovation, and team cohesion.                        | Limited focus on mediating variables such as employee engagement.           |
| Fareed et al.   | Influence of transformational leadership on employee and project outcomes | Quantitative survey               | Transformational leaders align employee goals with organizational objectives, enhancing commitment and adaptability.                     | Context-specific factors influencing effectiveness were not fully explored. |
| Nauman et al.   | Transactional leadership and project performance                          | Quantitative study                | Transactional leadership improves discipline, role clarity, performance monitoring, and task completion.                                 | Limited evidence regarding long-term innovation and engagement outcomes.    |
| Afzal and Tumpa | Comparison of transformational and transactional leadership               | Comparative quantitative research | Both leadership styles contribute to project outcomes, but effectiveness                                                                 | Joint effects and contextual influences remain underexplored.               |

|               |                                               |                    |                                                                                              |                                                                                                 |
|---------------|-----------------------------------------------|--------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|               |                                               |                    | depends on situational factors.                                                              |                                                                                                 |
| Ellahi et al. | Mechanisms linking leadership and performance | Quantitative study | Leadership influences organizational outcomes through psychological and behavioural factors. | Insufficient focus on employee engagement as a mediator between leadership and project success. |

#### 2.4.2 Job Satisfaction and Project Success

The role of job satisfaction in employee performance and organization effectiveness has been well accepted, although the cause and effect linkage of job satisfaction with the outcome of projects is a field that has not been thoroughly scrutinized. Workplace in project-based oriented settings ensures workers are the key players when it comes to the attainment of project goals and their satisfaction will have a direct impact on how well they deliver the duties they have been assigned (Verma et al., 2025). The resources at the organizational level, such as commitment, cooperation and consistency are more likely to be demonstrated by satisfied employees to ensure the successful delivery of projects. There is a general agreement in existing literature regarding the positive association between job satisfaction and project success. When employees are satisfied with their jobs, the level of motivation, productivity, and commitment to the organization increases (Zolfaghary et al., 2025). This results in enhanced team work, improved communication and quality output all of which translate to delivery of successful projects. It also lowers turnover intentions because of job satisfaction which is essential especially where a project is involved and a team of staff members is needed to achieve efficiency and transfer of ideas (Chen & Xie, 2025).

Nonetheless, the nature of relations between job satisfaction and project success is not always that positive even in the light of these positive associations. Other studies have claimed that job satisfaction might not be enough to ensure the project is successful unless other behavioural and psychological conditions like employee engagement are put in place (Shahid et al., 2025). In other instances, workers can tell that they are satisfied in their work but do not always stand to be engaged or even committed as to working beyond the household job duties. This means

that direct effect of job satisfaction on project outcome might not be in existence but the indirect effect might be achieved. One of the weaknesses of past studies lies in the fact that there is no clarity on the mechanisms of how job satisfaction can impact project success. Although a considerable number of studies have found a relationship between the two variables, a small number of studies have investigated the mediating processes. Specifically, employee engagement as a psychological mediator between job satisfaction and project success has not been adequately investigated, particularly non-Western. Hence, this research aims to fill this gap by analyzing not only the direct relation between the level of job satisfaction and the success of a project but also the indirect impact on it through the engagement of the employees (Woime & Shato, 2025). This method is a better insight into how satisfied employees would lead to the achievement of successful projects in organizational contexts.

#### **2.4.3. Employee Engagement as a mediator**

The engagement of employees has been generally acknowledged as a very important factor in the performance of the organizations and the success of the projects, but its role is yet to be clearly appreciated in most project based setups (Prebanić & Vukomanović, 2023). Engagement is the level at which employees are emotionally and cognitively engaged in their job and is very indicative of the energy, commitment and absorption levels (Malesu & Syrovátka, 2025). Employee engagement has been deemed as one of the major aspects that determines project success in project-based situations where teamwork, flexibility, and perseverance are paramount (Mohammad et al., 2025). The available literature mainly suggests that there is a positive correlation between employee engagement and project success. Employees who are engaged are likely to be more proactive, innovative and committed towards attainment of project objectives (Hossain & Islam, 2025). They have an increased tendency to work in teams effectively, resolve any issues as well and stay on top of their performance even during hard stresses. This helps to achieve better project results in terms of quality, time management and stakeholder satisfaction (Motalebi et al., 2025). Moreover, committed employees will have fewer burnout or disengagement occurrences, improving turnover and providing continuity in project teams. But these good results notwithstanding, the correlation between engagement of employees and success of the project is not always uniformly elucidated in the literature. With some studies considering engagement as a direct predictor of performance, others believe it has a more indirect effect, acting through other behavioural or organizational factors (AlMarri et al., 2025). This contradiction shows that the underlying

processes by which engagement affects project success are yet to be completely developed. The major gap in literature is the fact that there are no comprehensive models that assess employee engagement in relation to leadership styles and job satisfaction in the same model. The majority of the studies available do not examine engagement as a whole or examine its direct effects on the performance outcomes (Göküz & Akıner, 2025). Also, in non-Western settings, especially Saudi Arabia, little empirical studies have been done; hence, cultural values, leadership and organizational arrangements might affect the essence and effects of employee engagement differently (Verma et al., 2025). This paper fills this gap by theorizing the role of employee engagement as a mediating factor between leadership styles, job satisfaction and success of the project. In doing so, it offers a more detailed approach of how an engagement will translate the organizational and psychological elements into the successful project completion within the Saudi Arabian context.

**Table 2-3: Literature Matrix on Job Satisfaction, Employee Engagement, and Project Success**

| <b>Author(s) &amp; Year</b> | <b>Research Focus</b>                                                                        | <b>Methodology</b>  | <b>Key Findings</b>                                                                                           | <b>Research Gap Identified</b>                                                         |
|-----------------------------|----------------------------------------------------------------------------------------------|---------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Verma et al.                | Relationship between job satisfaction and project performance in project-based organizations | Quantitative survey | Satisfied employees contribute more effectively toward project objectives through commitment and cooperation. | Limited investigation of mediating mechanisms linking satisfaction to project success. |
| Zolfaghary et al.           | Impact of job satisfaction on employee and organizational performance                        | Quantitative study  | Job satisfaction improves motivation, productivity, and organizational commitment.                            | Project success outcomes were not examined in depth.                                   |

|                          |                                                     |                       |                                                                                                  |                                                                          |
|--------------------------|-----------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Chen and Xie             | Job satisfaction, retention, and workplace outcomes | Quantitative research | Higher job satisfaction reduces turnover intentions and enhances team stability.                 | Direct and indirect effects on project success remain underexplored.     |
| Shahid et al.            | Behavioural consequences of job satisfaction        | Quantitative study    | Job satisfaction alone may not guarantee superior performance without engagement and commitment. | Need to investigate employee engagement as a mediating variable.         |
| Woime and Shato          | Job satisfaction and project success mechanisms     | Quantitative analysis | Positive association exists between job satisfaction and project outcomes.                       | Lack of evidence on psychological pathways explaining this relationship. |
| Prebanić and Vukomanović | Employee engagement and project-based organizations | Literature review     | Employee engagement is a critical factor for organizational and project success.                 | Limited empirical testing in project environments.                       |
| Malesu and Syrovátka     | Conceptualization of employee engagement            | Quantitative study    | Engagement reflects employees' emotional, cognitive, and behavioural                             | Limited integration with leadership and project success variables.       |

|                   |                                                 |                       |                                                                                          |                                                                                   |
|-------------------|-------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                   |                                                 |                       | involvement in work.                                                                     |                                                                                   |
| Mohammad et al.   | Employee engagement as a project success factor | Quantitative research | Engagement improves teamwork, adaptability, and persistence in project environments.     | Mechanisms connecting engagement with leadership and satisfaction remain unclear. |
| Hossain and Islam | Engagement and employee performance outcomes    | Quantitative survey   | Engaged employees are more proactive, innovative, and committed to organizational goals. | Lack of project-specific mediation models.                                        |
| Motalebi et al.   | Employee engagement and project performance     | Quantitative analysis | Engagement improves project quality, stakeholder satisfaction, and time management.      | Limited examination of antecedent variables influencing engagement.               |
| AlMarri et al.    | Role of employee engagement in performance      | Quantitative study    | Engagement positively affects performance, though effects may be direct or indirect.     | Contradictory evidence regarding engagement pathways.                             |
| Göküz and Akıner  | Models of employee                              | Literature review     | Most studies examine engagement                                                          | Need for integrated models                                                        |

|              |                                     |                                |                                                                                          |                                                    |
|--------------|-------------------------------------|--------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------|
|              | engagement and performance          |                                | independently from leadership and satisfaction constructs.                               | combining multiple organizational variables.       |
| Verma et al. | Employee engagement across cultures | Comparative quantitative study | Cultural and organizational contexts influence engagement and performance relationships. | Limited evidence from Saudi Arabian organizations. |

## 2.5. Hypothesis Development

Based on the previous discussion, the following hypotheses are formulated:

H1: Transformational leadership has a positive and significant impact on project success.

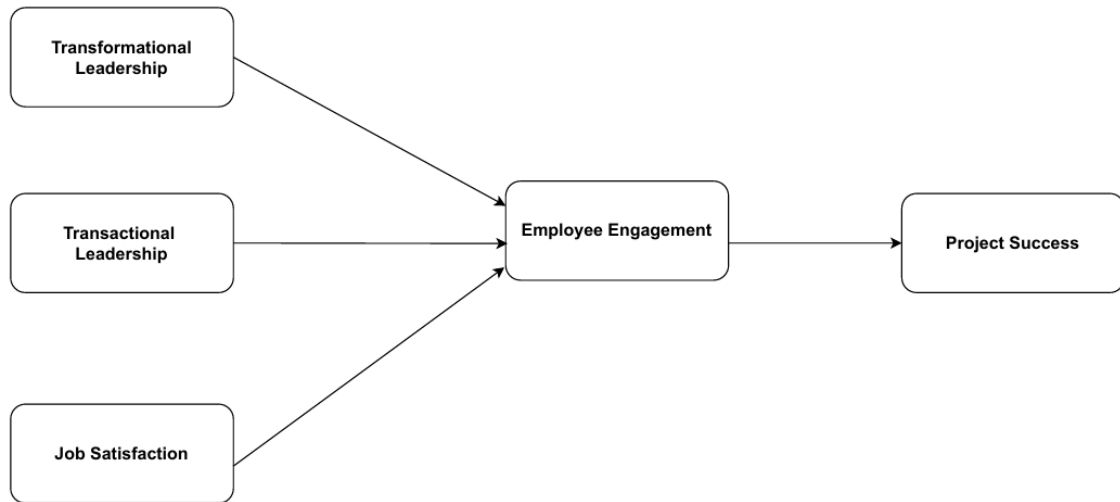
H2: Transactional leadership has a positive and significant impact on project success.

H3: Job satisfaction has a positive and significant impact on project success.

H4: Employee engagement mediates the relationship between transformational leadership and project success.

H5: Employee engagement mediates the relationship between transactional leadership and project success.

H6: Employee engagement mediates the relationship between job satisfaction and project success.



**Figure 1: Research Model**

**Source: Author Generated**

## 2.6. Research Gap

Although a large quantity of research has been conducted on leadership styles, job satisfaction, employee engagement and project success, a number of significant gaps exist in the literature that justifies the importance of the current study. First, these variables have been studied in the previous studies mostly in a piecemeal fashion with different researchers targeting separate relationships to include leadership and performance, or job satisfaction and outcomes, as opposed to developing a single comprehensive model of all the constructs. This constrains the realization of the interaction of these variables on how they together affect the success of the projects. Second, despite extensive research on transformational and transactional leadership, no one seems to have reached a definitive decision on which leadership approach works better in terms of making a project a success. There are researches focusing on the excellence of transformational leadership in boosting motivation and innovation, and those on the relevance of transactional leadership in maintaining order and accomplishing tasks. Nevertheless, there is still a lack of studies that research both types of leadership at the same time and especially in the project setting. Third, employee engagement mediating role has not been fully explored in literatures. Although the concept of engagement is identified as a significant predictor of performance, there are fewer studies aimed at exploring the role of engagement as a

psychological mechanism between leadership styles and job satisfaction and the success of the project. This hinders a more in-depth analysis of the causal mechanisms underlying project outcomes based on the mediation approach. Fourth, the available empirical findings are primarily obtained in the Western settings, and their organizational culture, leadership conduct, and employee anticipations can be quite different in Middle Eastern nations. Consequently, the context-specific studies are lacking that would test such relationships in Saudi Arabia where a fast economic development and the massive building of projects as a part of Vision 2030 have introduced specific organizational relationships. Lastly, research on specific topics such as project success as a multidimensional product that takes into consideration the behavioural, managerial and organizational approaches of measuring success as opposed to such outcomes based on technical indicators is relatively scarce. Thus, the research fills these gaps by creating a unified framework, which looks at the direct and indirect impacts of leadership styles and job satisfaction on project success based on employee engagement within Saudi Arabian context.

## **2.7. Chapter Conclusion**

The chapter has given an in-depth review of the literature currently available concerning leadership styles, job satisfaction, employee engagement and project success. It started with a theoretical construct that illustrated the major theories that supported the relationship between the study variables, which were transformational leadership theory, transactional leadership theory, the Two-Factor Theory of Herzberg, Social Exchange Theory, and the Job Demands-Resources model. All these theories formed a solid background on the view that factors such as leadership behaviour and employee attitudes bring out the best in any organisation. The chapter also focused on each variable separately, introducing their definitions, dimensions and applicability within an organizational context and projects. The styles of leadership transformational and transactional were addressed regarding their influence on employee behaviour and project outcomes. Job satisfaction was discussed as one of the fundamental psychological traits that affect employee motivation and performance, whereas employee engagement was linked to playing the significant role of influencing proactive behaviour and organizational commitment. Project success was also managed as multidimensional construct and was not solely related to the conventional time, cost and quality measures. Moreover, the chapter examined the correlations between the variables, both the direct and indirect impact of the variables with earlier research. The mediating role of employee engagement that is frequently not considered in the existing body of literature was also given a special focus. Key

gaps were also spotted, such as the absence of integrating models, fewer mediation-based researches, and fewer studies that take place in the Saudi Arabian context. Broadly, this chapter has given the present study a solid theoretical and empirical basis and it has provided the rationale of the necessity to conduct additional research on the joint impact of styles of leadership and job satisfaction on the project success via employee engagement.

## **CHAPTER 3: METHODOLOGY**

### **3.1. Chapter Introduction**

The chapter outlines the approach to be used in the implementation of the current study, which investigates how the leadership styles and job satisfaction influence project success with mediation of employee engagement in Saudi Arabian organizations. Methods are a key section of the research because it describes the general procedure of the research to collect, analyse and interpret data in a systematic, rational way. It makes sure that the study can be carried out in an organized manner that promotes validity, reliability and credibility of the results. In the chapter, the research philosophy and approach are outlined and they give the philosophical basis of the way knowledge is perceived and how the research problem is solved. It goes on to describe the research design and strategy followed in the attainment of the study objectives. Moreover, the study population, sampling method and sample size are elaborated to reveal the way respondents are chosen and the reason why they are the right people to be involved in the research. Moreover, this chapter explains methods of data collection to obtain primary data by researching respondents and methods of data analysis to interpret information collected. Ethical implications are also emphasized to be sure the research can be properly conducted without violating the rights and confidentiality of the participants. On the whole, this chapter of the methodology offers a clear map of the way of how the research is conducted and this way provides clarity and repetition as well as methodological rigor of the research. It constitutes the foundation of the research process and it directly leads to the attainment of the research objectives and the answers to the research questions.

### **3.2. Research Philosophy**

The research has been developed with the positivist research philosophy since it will be attempting to analyse the associations between leadership styles, job satisfaction, employee engagement and project success based on the objective measurements and statistical analysis (Ali, 2024). Positivism is based on the premise that reality is external, objective and able to be seen and measured using empirical evidence. It presupposes that, it is possible to investigate social phenomena such as organizational behaviour by the application of scientific techniques that are usually applied in the natural sciences (Park et al., 2020). The positivism approach in

this study is suitable as the research aims at testing given hypotheses based on the current theories as opposed to coming up with new subjective readings (Maretha, 2023). The connections among variables of transformational leadership, transactional leadership, job satisfaction, employee engagement and the success of projects are tested with the help of the measurable data generated on the respondents in project organizations. This enables the researcher to draw patterns, correlations, cause and effects in a systematic and structured way. The other motive behind taking a positivist approach is that it preaches on objectivity and generalizability. This has been attributed to the fact that the data used is gathered by standardized questionnaires and analysed through the help of statistical methods thus, the results are not as susceptible to personal prejudice or interpretation. This increases the reliability and validity of the findings, which can be applied more in the context of comparable organizations beyond those included in the immediate sample of the study. Moreover, positivism encourages tests of hypotheses, which is a major requirement of this study. The study will conduct an empirical test to determine if leadership styles and employment satisfaction actually have a great influence on the successfulness of a project and whether the relationship is mediated by employee engagement. Such research guided by hypotheses is effectively consistent with positivist paradigm that aims at validating theoretical statements using quantifiable data. Moreover, positivism is actually a popular method of conducting management and organizational research, as one can perform unambiguous, systematic, and reproducible studies. Since the current study will entail the examination of behavioural associations in the Saudi Arabian organizations, the positivist approach assures that the findings made in the current research will be grounded on facts and not opinions. Thus, positivist philosophy best fits the current study since it offers a rigorous, objective and a scientific framework of study into the proposed relationships between the research variables involved in the study.

### **3.3. Research Approach**

The research paper uses a deductive research design, arguably the most suitable research design in investigating the correlation among the leadership styles, job satisfaction, employee engagement and the success of a project (Pearse, 2019). A deductive methodology is based on the use of already formed theories and conceptual frameworks on which certain hypotheses are formulated and then tested with the help of empirical data. The method fits well with the positivism philosophy that is selected in the study since they both focus on objectivity,

measurement, and testing of hypotheses. Deductive methodology is appropriate in this research since the research is founded on well-developed theories like the transformational leadership theory, transactional leadership theory and Job Demands Resources model (Casula et al., 2021). These theories offer a solid ground towards the prediction of relationships among the variables. To illustrate that, the theoretical relationship goes as to pose that transformational leadership has a positive impact on employee engagement and project success whereas job satisfaction has an expectation of a positive impact on employee engagement, which will subsequently impact on the project success. These hypothetical statements are converted into testable hypotheses which are used to conduct the research. Data in this research is gathered by use of structured questionnaires and statistical methods are employed in testing the hypotheses. This is similar to the deductive approach that focuses on quantitative data application to test, and disapprove or confirm the theories in existence (Soiferman, 2010). Through numerical data analysis, the research will be useful in establishing whether, or not, the hypothesized associations between variables hold in the context of Saudi Arabian based organizations with projects. One more justification of the deductive approach is that it gives clarity and organization to the research process. It enables the researcher to transpose logically through theory to observation and makes the research focused and systematic. This method further increases the reliability and generalizability of results in that it is grounded on standardized practices and objective analysis of data. Additionally, deductive approach is very common in management and organizational research, especially where one wants to test the theories available in new environments. In this example, the implementation of existing theories into the Saudi Arabian context may allow to understand whether these relationships are valid in another culture and organization. In general, the deductive approach will offer a clear, logical as well as scientifically sound way of testing the hypothesized relationship in this project.

### **3.4. Research Design**

This study used a quantitative research design in order to analyse the effects of leadership styles and job satisfaction on the success of a project and employee engagement as a mediating factor (Holton & Burnett, 2005). Quantitative design is also fitting regarding the fact that it enables the researcher to communicate in numerical forms and use statistical methods to investigate associations among the variables in a systematic and objective way (Mohajan, 2020). Because the study will be designed to test some hypotheses, which are predetermined based on some theories, then a quantitative approach is the most appropriate to achieve the end. The

quantitative research design aims at quantifying variables numerically and examining them mathematically to reveal the patterns, interactions and causation. Some of the variables considered in this research include transformational leadership, transactional leadership, job satisfaction, employee engagement and project success since the quantitative measurements of these factors are required through structured survey instruments and responses with Likert scale. This allows one to convert the subjective perceptions into measurable information and subject it to statistical analysis. The quantitative research design has one of its greatest strengths in that it is able to provide objectivity and reliability (Sürücü & Maslakci, 2020). The research involves the use of standardized questionnaires, meaning that bias in the researcher will be minimized and that data will also be collected consistently. This increases the validity of the findings and makes it replicable in similar situations. The application of statistical analysis further facilitates the researcher to test hypotheses and identify the level of significance and strength of relationship between the variables. The generalizability is another key aspect of the quantitative design. Because data is gathered based on a sample of respondents who represent project-based organizations in Saudi Arabia, there is a possibility that the results can be extrapolated to a larger population, in project-based organizations in general. This is especially so to this study, as it would give insights that can be translated into the actual project management practice. The quantitative research design, in general, offers a scientific and systematic way to conduct a study involving the relationship between leadership styles, job satisfaction, possible employee engagement, and project success. It makes the study data-driven, objective and testable on a hypothesis so it is a good choice in meeting the research objectives.

### **3.5. Research Strategy**

The research design to be used in this research article is a survey research design that will use online questionnaire. A survey design is one of the most popular in quantitative research due to the possibility of collecting standardized data using a relatively large sample of respondents in a simple and not very costly way (Roopa & Rani, 2012). The survey approach is suitable in the circumstances of our research since it will help the researcher to collect information regarding the perceptions, attitudes, and experiences associated with leadership styles, job satisfaction, employee engagement, and project success. A survey, which is conducted online, is specifically appropriate because it is convenient, accessible, and able to achieve respondents in various organizational contexts in Saudi Arabia (Shrestha, 2021). Considering the

geographic spread of the project-based organizations, online data collection will have greater coverage and a higher rate of responding to the same as compared to the paper-based survey. It also enables the respondent to fill in the questionnaire at his/her convenience which could enhance the quality and accuracy of responses. The questionnaire to be used in the survey is designed using structured items, which use accepted measurement scales in past research. The answers to these questions are normally rated on a Likert scale where the respondent can rate the degree of agreement or disagreement with certain statements. It guarantees a uniformity of response since it is a structured format, and it is easy to analyse statistically. The second benefit of the survey method is that it allows to gather data on a relatively large sample within a short time period. This will be critical in improving reliability and generalizability of the study results. Also, standardized questionnaires minimize researcher bias and are also used to make sure that every participant has been asked to answer a common set of questions. To conclude, the online survey approach is the practical and efficient approach in the current study to gather quantitative information. It facilitates the aims of the study as it allows to collect the data systematically and gives a good basis to analyse the relations between the main variables statistically.

### **3.6. Population and Sampling**

This research project will involve employees and members of project teams of organizations that are based on projects in Saudi Arabia. This particularly focuses on organizations based in major cities like Riyadh, Jeddah and Dammam, where many of the national and multinational corporations are engaged in project-related work. The targeted sectors are construction, information technology, and telecommunications since these are areas of performance that highly depend on the execution of a project and team-based performance. Workers in such organizations directly engage in project work making them good respondents of studying leadership styles, job satisfaction, employee engagement and project success. Out of this population a sample size of 200-300 respondents will be used to collect data. This is a sample size that is argued to be suitable to quantitative analysis especially the statistical methods employed to either test relationships or mediation effects. The sample selected will cover various job positions, departments and the levels within the organizations that use project based organizations to enable there to be a variety of responses and the findings shall be more reliable. The sampling will be tailored so that the sampled respondents have pertinent experience in project settings and can give full-fledged responses on the leadership practice, level of job

satisfaction, involvement, and project results. This boosts the accuracy and relevancy of the data gathered towards the study.

### **3.7. Sampling Technique**

In this research, a synthesis of purposive sampling and convenience sampling will be used in order to sample the respondents of the target population (Etikan et al., 2016). The study also employs the purposive sampling technique, based on the fact that the exact target population of the study is the employees who directly engage in project based work. This makes sure that only those people who are relevant in terms of experience in leadership, job satisfaction and project execution are incorporated in the sample (Zeqiri et al., 2023). By making a choice of the respondents according to their job roles and participation in the projects, the researcher will guarantee the relevance of the data gathered and also the appropriateness and compatibility to the purpose of the research. Besides purposive sampling, there is also convenience sampling to aid in collection of data. Time and availability of resources mean that the respondents will be selected according to their availability and willingness to take part in the study. This will enable the researcher to collect data among the employees in various organizations in cities like Riyadh, Jeddah and Dammam in an effective manner (Acharya et al., 2013). Questionnaires are distributed online, which also helps to justify the convenience sampling approach by means of easy access of the participants in various locations.

### **3.8. Sample Size**

This research has a suggested sample size of about 350 to 400 respondents who are in Saudi Arabian project-based establishment. This also covers employees and project team members of such important industries as construction, information technology and telecommunication. They have been chosen since these sectors largely depend on project performance and teams and thus are of great interest in the objectives of the research. An adequate sample size of 350-400 is believed to be suitable to quantitative research especially when statistical analysis is applied like correlation, regression, and mediation analysis. Having a bigger sample enhances the reliability and validity of the results since it minimizes sampling error and maximizes the accuracy of the statistical estimates. It also makes the results more generalizable, meaning the results can be more reflective of a broader group of project-based workers in Saudi Arabia. Another factor by which this sample size has been selected is the needs of multivariate analysis method that usually demands a medium and large amount of responses to generate a consistent

and meaningful result. Because this is a research research where it is crucial to consider various relationships among the variables, including: leadership styles, job satisfaction, employee engagement and project success, a large sample size is important to guarantee a strong statistical power. Furthermore, the sample size is made to reflect diversity in the various job roles, departments and the hierarchy of the organization. This will be used to get a wider view of the research problem, which includes the views of both managerial and non-managerial employees. In general, the selected sample (350-400 respondents) is sufficient to fulfil the objectives of the research and contributes to the reliability, validity and generalizability of the research findings.

### 3.9. Data Collection and Analysis

This research will employ the structured online questionnaire to gather data on employees with organizations dealing with projects in Saudi Arabia. The questionnaire will be formulated with the help of the scales that have been discussed as valid in the earlier studies and follow closed-ended questions that would be measured on a five-point Likert scale that would include strongly disagree, strongly agree. The procedure would be consistent in terms of answers and will allow carrying out a quantitative analysis. Online survey will be in form of emails, professional networks and organizational contacts so as to reach employees in such cities like Riyadh, Jeddah and Dammam. The method is effective, economical and appropriate to achieve a geographically spread population. Respondents will be made aware of the aim of the study and participation will be voluntary and anonymous to reflect honesty and wield ethical consciences. After data has been collected, it will be filtered by checking its completeness and accuracy after which the data will be analysed. They will be summarised using descriptive statistics including frequency, mean and standard deviation to give a summary of the respondent characteristics and the distribution of variables.

**Table 3-1: Variable items and Sources**

| Variable Name               | Number of Items | Source                   |
|-----------------------------|-----------------|--------------------------|
| Transformational Leadership | 9 items         | (Bagga et al., 2023)     |
| Transactional Leadership    | 5 items         | (Ismail et al., 2010)    |
| Job Satisfaction            | 3 items         | (Netemeyer et al., 2010) |
| Employee Engagement         | 11 items        | (Gupta et al., 2021)     |

|                 |         |                                |
|-----------------|---------|--------------------------------|
| Project Success | 7 items | (Al-Balawneh & Tarabieh, 2024) |
|-----------------|---------|--------------------------------|

To analyse the correlation and multiple regression analysis will be employed to analyse the relationship between leadership styles and job satisfaction, as well as employee engagement and project success to do the inferential analysis. Also, mediation analysis will be undertaken to determine the indirect impact of employee engagement on the relationship between the independent and dependent variables. The analysis will be done using statistical software including SPSS or other software. This will make sure that there is accuracy, efficiency and reliability in interpreting the data.

### 3.10. Ethical Considerations

This research has a significant ethical component that needs to be considered to make the study responsible, transparent and respectful. Given that, it is necessary to safeguard the rights, privacy and well-being of human participants in project-based organizations in Saudi Arabia during the provision of their services in the study. Informed consent is one of the main ethical principles of the present study. They will all be told in detail what the research is about, how they will take part and what will become of the data that will be gathered. They will be allowed to participate in the study out of their will without being compelled and pressured to do so. The participants will also be free to pull out of study at any time with not being negatively impacted by it. There is also the strict anonymity and privacy. No section of the study will gather or reveal personality of respondents. Any answers will remain confidential and will be utilized only on an academic level. The reporting of data will be done in an aggregated manner such that no individual participant or organization will be identified.

**Table 3-2: Summary of Research Methodology**

| <b>Methodological Component</b> | <b>Description</b> | <b>Justification</b>                          | <b>Application in Current Study</b>               |
|---------------------------------|--------------------|-----------------------------------------------|---------------------------------------------------|
| <b>Research Philosophy</b>      | Positivism         | Positivism assumes that reality is objective, | The study examines measurable relationships among |

|                          |                              |                                                                                                      |                                                                                                                                                |
|--------------------------|------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
|                          |                              | measurable, and can be examined through empirical evidence and statistical testing.                  | TL, TRL, JS, EE, and PS using quantitative data and hypothesis testing.                                                                        |
| <b>Research Approach</b> | Deductive Approach           | Deductive research develops hypotheses from existing theories and tests them using collected data.   | Hypotheses were derived from Transformational Leadership Theory, Transactional Leadership Theory, and the JD-R Model and tested statistically. |
| <b>Research Design</b>   | Quantitative Research Design | Quantitative design enables numerical measurement of variables and objective statistical analysis.   | Responses were collected using structured questionnaires and analysed through statistical techniques.                                          |
| <b>Research Strategy</b> | Survey Research Strategy     | Surveys allow collection of standardized information from a large number of respondents efficiently. | An online questionnaire was distributed among employees working in project-based organizations in Saudi Arabia.                                |
| <b>Research Type</b>     | Explanatory Research         | Explanatory studies investigate cause-and-effect relationships among variables.                      | The study examines how leadership styles and JS influence PS directly and indirectly through EE.                                               |
| <b>Research Setting</b>  | Cross-sectional Study        | Cross-sectional studies collect data                                                                 | Data were collected once from respondents                                                                                                      |

|                           |                                                              |                                                                                                                           |                                                                                          |
|---------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                           |                                                              | at a single point in time.                                                                                                | rather than over multiple periods.                                                       |
| <b>Target Population</b>  | Employees working in project-based organizations             | These employees possess direct experience regarding leadership practices, engagement, satisfaction, and project outcomes. | Respondents were selected from project-oriented organizations operating in Saudi Arabia. |
| <b>Geographical Scope</b> | Saudi Arabia                                                 | Saudi Arabia provides a relevant setting due to its increasing emphasis on project-based organizational structures.       | Data were collected from Riyadh, Jeddah, Dammam, and other major cities.                 |
| <b>Industrial Scope</b>   | Construction, Information Technology, and Telecommunications | These sectors are highly project-oriented and rely heavily on leadership and teamwork.                                    | Employees from these industries formed the study population.                             |
| <b>Sampling Technique</b> | Purposive and Convenience Sampling                           | Purposive sampling ensures relevance while convenience sampling improves accessibility and response rates.                | Respondents were selected based on project involvement and willingness to participate.   |
| <b>Sample Size</b>        | 350–400 proposed respondents (Actual = 312 valid responses)  | Adequate sample size improves statistical power, reliability, and generalizability.                                       | A total of 312 usable questionnaires were analysed.                                      |

|                               |                                  |                                                                                         |                                                                                                         |
|-------------------------------|----------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Data Collection Method</b> | Online Questionnaire Survey      | Online surveys provide cost-effective and geographically extensive data collection.     | Questionnaire links were distributed through organizational contacts, email, and professional networks. |
| <b>Measurement Scale</b>      | Five-Point Likert Scale          | Likert scales effectively capture perceptions and attitudes in organizational research. | Responses ranged from 1 = Strongly Disagree to 5 = Strongly Agree.                                      |
| <b>Data Type</b>              | Primary Data                     | Primary data provide direct evidence from respondents regarding study variables.        | Information was obtained directly from employees working in project environments.                       |
| <b>Independent Variable 1</b> | Transformational Leadership (TL) | Leadership style emphasizing inspiration, vision, and motivation.                       | Measured using 9 items adapted from Bagga et al. (2023).                                                |
| <b>Independent Variable 2</b> | Transactional Leadership (TRL)   | Leadership style emphasizing rewards, monitoring, and performance control.              | Measured using 5 items adapted from Ismail et al. (2010).                                               |
| <b>Independent Variable 3</b> | Job Satisfaction (JS)            | Employees' level of satisfaction with their jobs and work environment.                  | Measured using 3 items adapted from Netemeyer et al. (2010).                                            |
| <b>Mediator Variable</b>      | Employee Engagement (EE)         | Psychological involvement and commitment of                                             | Measured using 11 items adapted from Gupta et al. (2021).                                               |

|                               |                                              |                                                                               |                                                                                                |
|-------------------------------|----------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|                               |                                              | employees toward their work.                                                  |                                                                                                |
| <b>Dependent Variable</b>     | Project Success (PS)                         | Overall achievement of project goals and outcomes.                            | Measured using 7 items adapted from Al-Balawneh and Tarabieh (2024).                           |
| <b>Reliability Analysis</b>   | Cronbach's Alpha                             | Assesses internal consistency of measurement scales.                          | Reliability values ranged from 0.653 to 0.920, indicating acceptable to excellent reliability. |
| <b>Validity Assessment</b>    | Factor Analysis (Rotated Component Matrix)   | Evaluates construct validity and dimensionality of measurement scales.        | PCA with Varimax Rotation was conducted to verify factor structure.                            |
| <b>Descriptive Statistics</b> | Mean, Standard Deviation, Skewness, Kurtosis | Summarizes respondent characteristics and variable distributions.             | Used to assess central tendency, variability, and normality.                                   |
| <b>Correlation Analysis</b>   | Pearson Correlation                          | Determines the strength and direction of relationships between variables.     | Used to evaluate associations among TL, TRL, JS, EE, and PS.                                   |
| <b>Regression Analysis</b>    | Multiple Linear Regression                   | Tests the predictive effects of independent variables on dependent variables. | Examined the effects of TL and TRL on JS and project-related outcomes.                         |
| <b>Mediation Analysis</b>     | PROCESS Macro Model 4                        | Evaluates indirect effects through a mediator variable.                       | Tested EE as a mediator between                                                                |

|                             |                                                                     |                                                                                    |                                                                                                    |
|-----------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                             |                                                                     |                                                                                    | leadership styles, JS, and PS.                                                                     |
| <b>Statistical Software</b> | SPSS Version 29 and PROCESS Macro v4.2                              | Provides advanced statistical analysis and mediation testing capabilities.         | Used for descriptive, inferential, reliability, validity, regression, and mediation analyses.      |
| <b>Ethical Principle 1</b>  | Informed Consent                                                    | Participants must voluntarily agree to participate.                                | Study purpose and participation requirements were clearly communicated.                            |
| <b>Ethical Principle 2</b>  | Confidentiality                                                     | Personal information must remain protected.                                        | No identifying information was collected or disclosed.                                             |
| <b>Ethical Principle 3</b>  | Voluntary Participation                                             | Participants can withdraw without penalty.                                         | Respondents participated voluntarily and could discontinue at any stage.                           |
| <b>Ethical Principle 4</b>  | Data Protection                                                     | Research data must be securely handled and used only for academic purposes.        | Responses were stored securely and analysed anonymously.                                           |
| <b>Expected Outcome</b>     | Empirical validation of relationships among TL, TRL, JS, EE, and PS | Provides theoretical and practical insights into project management effectiveness. | Supports understanding of direct and mediated effects influencing project success in Saudi Arabia. |

### 3.11. Chapter Conclusion

This chapter has presented a detailed explanation of the research methodology adopted for this study. It describes the philosophical foundations, research approach, design, strategy and procedures used for data collection and analysis. It outlined the philosophical foundation, research approach, design, strategy, and procedures used for collecting and analysing data. The study is based on a positivist philosophy and a deductive approach, which supports the verification of hypotheses derived from established theories in a structured and objective manner. It supports the testing of hypotheses derived from established theories in a structured and objective manner. A quantitative research design was selected to ensure that data could be measured numerically and analyzed statistically to examine the relationships between leadership styles, job satisfaction, employee engagement, and project success. It analysed statistically to examine the relationships between leadership styles, job satisfaction, employee engagement, and project success.

The chapter also explains the use of an online survey strategy for data collection, which allows efficient and extensive access to respondents from project-based organizations across Saudi Arabia. It explained the use of an online survey strategy for data collection, which enables efficient and wide-reaching access to respondents in project-based organizations across Saudi Arabia. The sampling approach combines purposive and convenience sampling techniques, targeting employees directly involved in project work in key sectors such as construction, IT and telecommunications. Within key industries such as construction, IT, and telecommunications. A sample size of 350 to 400 respondents was identified as appropriate to ensure statistical reliability and generalizability of the results. 350 to 400 respondents were identified as appropriate for ensuring statistical reliability and generalizability of results.

In addition, the chapter describes data analysis techniques, including descriptive and inferential statistics, as well as mediation analysis to test the proposed research model.

Furthermore, the chapter described the data analysis techniques, including descriptive and inferential statistics, along with mediation analysis to test the proposed research model. Ethical considerations were also taken into account to ensure confidentiality, informed consent and responsible data processing. It addressed to ensure confidentiality, informed consent, and responsible handling of data.

Overall, this methodological chapter provides a clear and systematic framework for conducting research. The methodology chapter provides a clear and systematic framework for conducting the research. It ensures that the study is scientifically rigorous, ethically sound and capable of producing reliable results that contribute to both academic knowledge and practical understanding.

ing of project success in the Saudi context. sound, and capable of producing reliable findings that contribute to both academic knowledge and practical understanding of project success in the Saudi Arabian context.

## **CHAPTER 4: RESULTS**

### **4.1. Introduction**

The findings/results of the study presented in this chapter are based on Statistical Analysis of the collected data to examine the relationships amongst the variables of the research which includes transformational leadership (TL), transactional/role-based leadership (TRL), employee engagement (EE), job satisfaction (JS) and perceived performance (PS). The answers are structured in a systematic or logical manner starting from a demographic profile of the respondents, moving on to descriptive statistics, correlation analysis, reliability assessment, factor analysis, the results of regression and the conducted mediation testing. The demographic section gives a general overview of the respondents' age, gender, work experiences, department and job title. This will aid an understanding of the makeup of the sample and an understanding of which background they would be applicable to. In a next step, the main study variables are summarized by descriptive statistics, which provide information on the central trends and distribution of the variables and thereby provide information about the general perception of the respondents. Moreover, relationships among the variables of the study have been analysed by correlation and the internal consistency of the scales have been tested by Cronbach's  $\alpha$ . The construct structure is further confirmed by factor analysis (rotated component matrix) showing that the items appropriately load on their respective factors. Finally, regression and mediation analyses are conducted to confirm the proposed hypotheses and the direct and indirect relationships between the variables are explored. This, specifically, is the role of employee engagement (EE) between the relationship among leadership styles, job satisfaction, and perceived performance. As a conclusion, every aspect of the present chapter is comprehensive enough to give a solid statistic on which to base future conclusions in the next chapter.

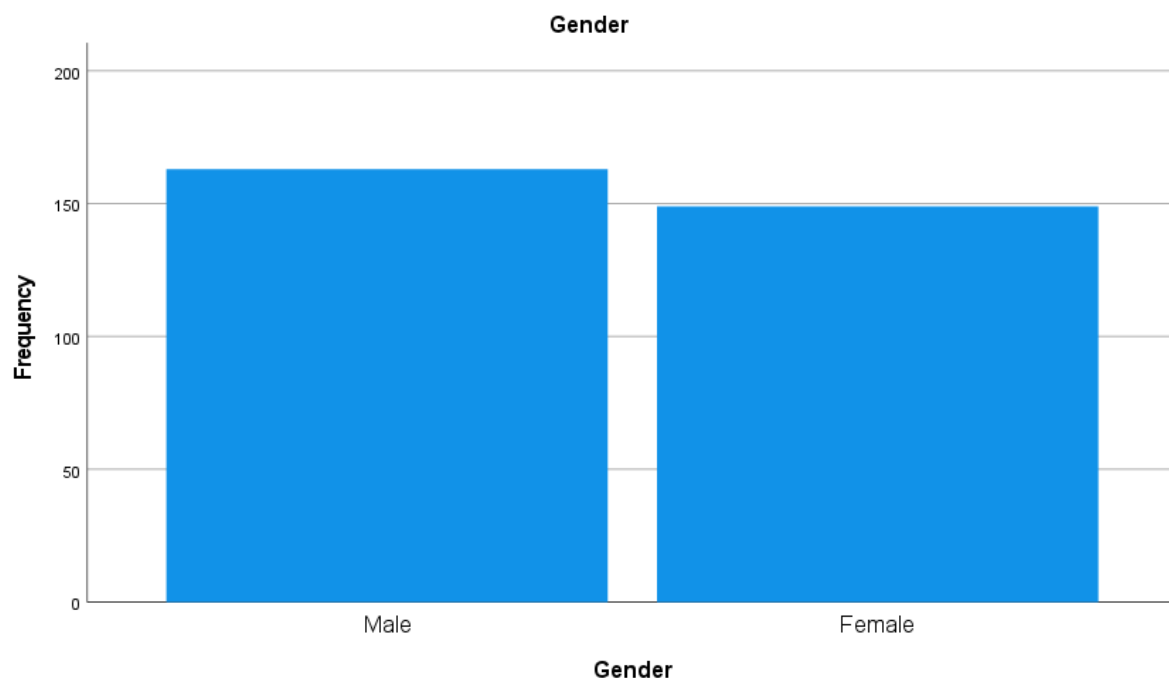
### **4.2. Demographics of Respondents**

In terms of the gender distribution of the respondents, a fairly balanced sample suggests that the results of the study are fairly representative. A total of 312 respondents answered, with 163 of them (52.2%) being male and 149 (47.8%) female. This evenness implies that both genders were somewhat well represented in the data and that there is a low risk that there is gender bias in the data analysed for the variables of this study. This sampling ratio of male to female

respondents does reflect the common organizational pattern that more men are represented than women in managerial/service or operational positions. The gap between the results of men and women, however, is not significant enough to alter the overall interpretation. As the levels of involvement for both sexes is well-balanced, the findings are more reliable and more generally applicable, since perceptions of leadership styles, job satisfaction and employee engagement, as well as perceptions of performance are captured from both male and female. In summary, the gender profile reveals that the sample is inclusive and suitable for carrying out comparative and inferential statistical analysis in the study.

**Table 4-1: Demographic profile of respondents**

|       |        | Gender    |         |               |                    |
|-------|--------|-----------|---------|---------------|--------------------|
|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Male   | 163       | 52.2    | 52.2          | 52.2               |
|       | Female | 149       | 47.8    | 47.8          | 100.0              |
|       | Total  | 312       | 100.0   | 100.0         |                    |

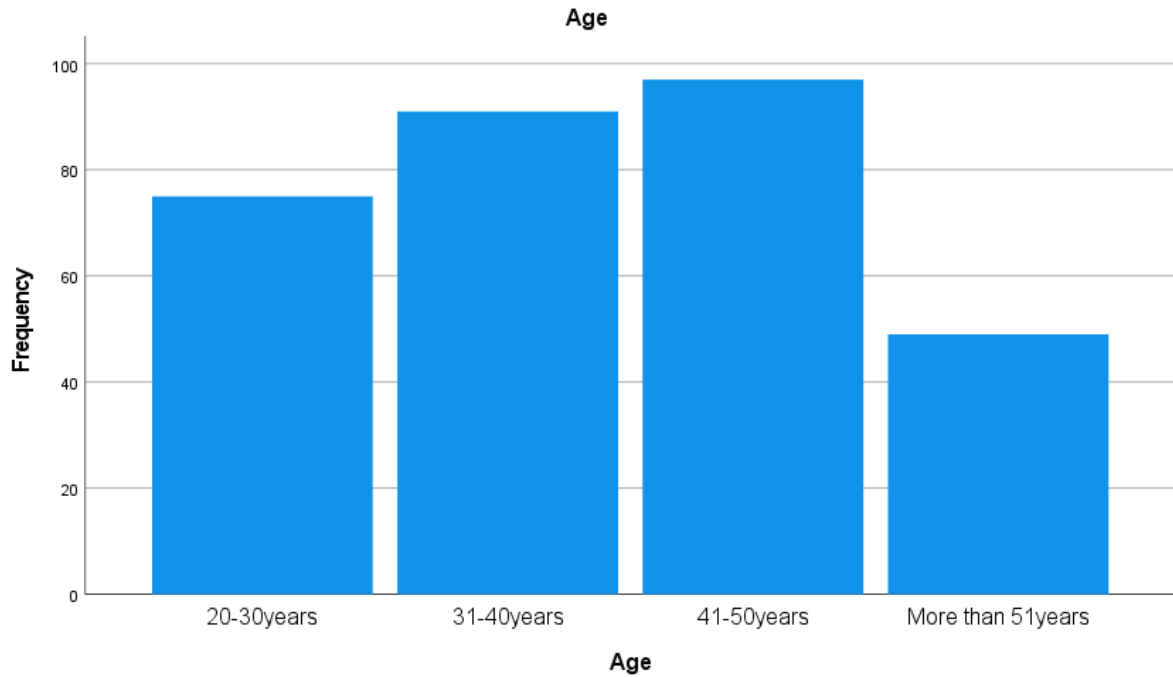


**Figure 4-1: Gender of respondents**

The age distribution of the sample indicates a diversity of age groups within the respondents, representing the diversity of age groups in the workforce. The largest percentage of the

respondents (31.1%) are aged 41-50 years and closely followed by 31-40 years (29.2%). Twenty to 30-year-olds make up 24.0% and those over 51 years old make up the smallest proportion of respondents (15.7%). This distribution reflects that the majority of the respondents belong to the middle of the career path and have significant exposure to work which has thereby significant relevance for ensuring informed responses to organizational practices. The representation of younger staff (aged 20-30) also contributes to the diversity of points because of their views related to job satisfaction and engagement. Likewise, the presence of senior aged respondents adds depth in depth of insights with regards to leadership perception and organizational performance. Overall, the age data looked like a mature experienced workforce with appropriate data to explore the relationships between leadership styles, employee engagement and performance outcomes.

|       |                   | Age       |         |               |                    |
|-------|-------------------|-----------|---------|---------------|--------------------|
|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 20-30years        | 75        | 24.0    | 24.0          | 24.0               |
|       | 31-40years        | 91        | 29.2    | 29.2          | 53.2               |
|       | 41-50years        | 97        | 31.1    | 31.1          | 84.3               |
|       | More than 51years | 49        | 15.7    | 15.7          | 100.0              |
|       | Total             | 312       | 100.0   | 100.0         |                    |

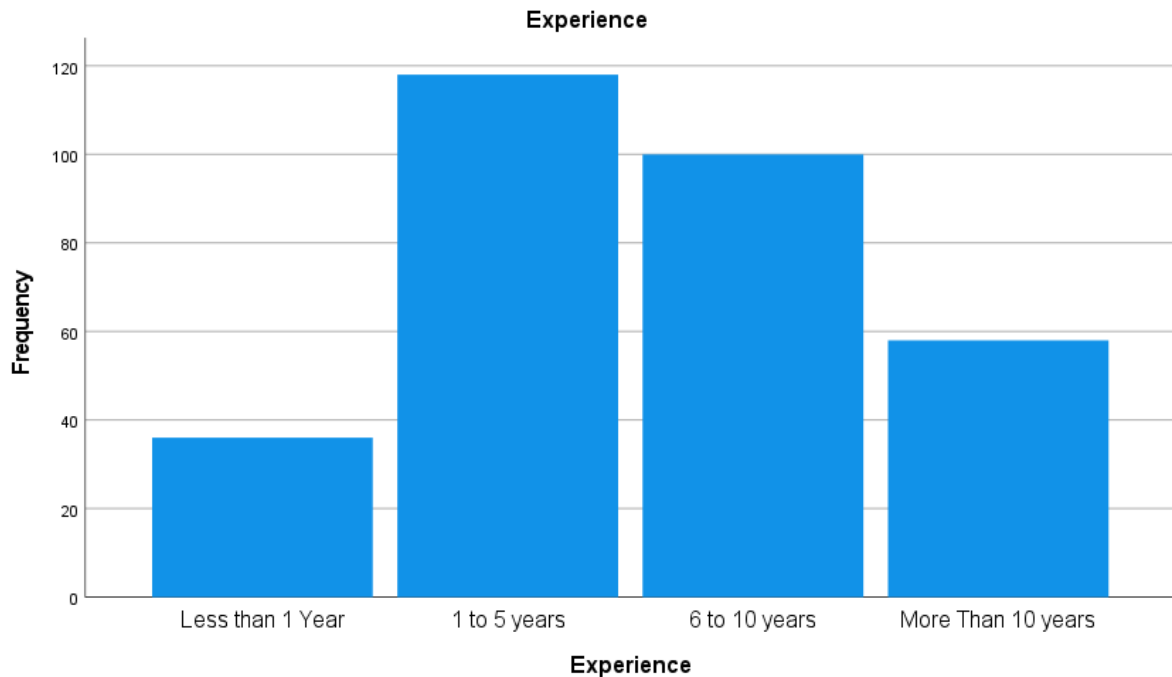


**Figure 4-2: Age of respondents**

A higher number of respondents have a wide range of length of working experience, as seen in the work experience profile. There are 37.8% with 1-5 years experience, 32.1% with 6-10 years experience and 18% with 11-15 years experience. The most are 1-5 years experienced with 37.8%, then 32.1% 6-10 years experienced and then 18% 11-15 years experienced. Those who have over 10 years experience make up 18.6% of respondents, the smallest being those with less than 1 year experience (11.5%). The distribution indicates that most of the respondents are relatively experienced professionals, as a majority had experience of exposure in the organization for at least one year. This type of rostering boosts confidence in responses as those with practical experience tend to be more knowledgeable and realistic about leadership practices and workplace conditions. Furthermore, it includes both inexperienced and highly experienced staff to incorporate a wide range of views in the study. This difference in experience levels enhances the generalizability of the results and further contributes to the understanding relating to the impact of leadership styles on the engagement, satisfaction and performance of employees throughout their careers.

| Experience |         |               |                    |
|------------|---------|---------------|--------------------|
| Frequency  | Percent | Valid Percent | Cumulative Percent |

|       |                    |     |       |       |       |
|-------|--------------------|-----|-------|-------|-------|
| Valid | Less than 1 Year   | 36  | 11.5  | 11.5  | 11.5  |
|       | 1 to 5 years       | 118 | 37.8  | 37.8  | 49.4  |
|       | 6 to 10 years      | 100 | 32.1  | 32.1  | 81.4  |
|       | More Than 10 years | 58  | 18.6  | 18.6  | 100.0 |
|       | Total              | 312 | 100.0 | 100.0 |       |

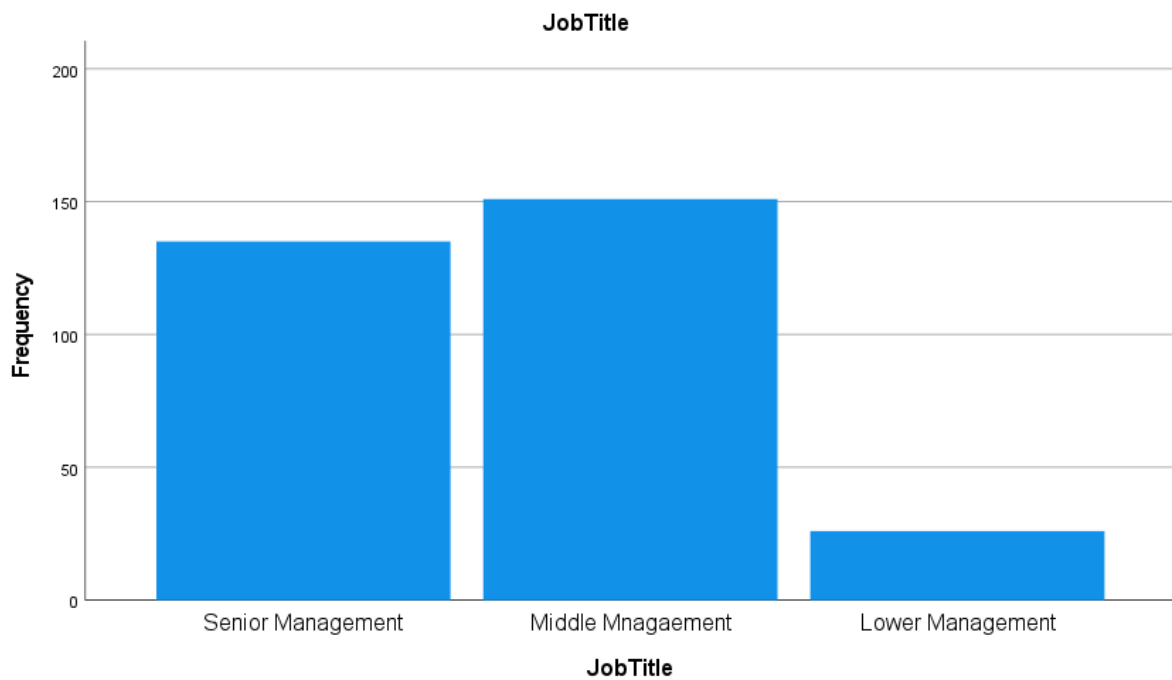


**Figure 4-3: Experience of respondents**

As indicated in the job title distribution, respondents come from varying levels of organizational hierarchy, providing a decent sampling of managerial views. A significant population of respondents is living in middle management (48.4%), less so within senior management (43.3%) and, finally, lower management (8.3%). This means that this sample contains mostly the decision makers and supervisory level employees who are active in leadership and organizational processes. Having more middle and senior management participants helps this study gain greater value because these PMs are more likely to be directly involved with leadership practices, employee engagement practices and systems of performance management. Lower management is less represented but where it has been possible, it helps to pick up the local picture.

#### **JobTitle**

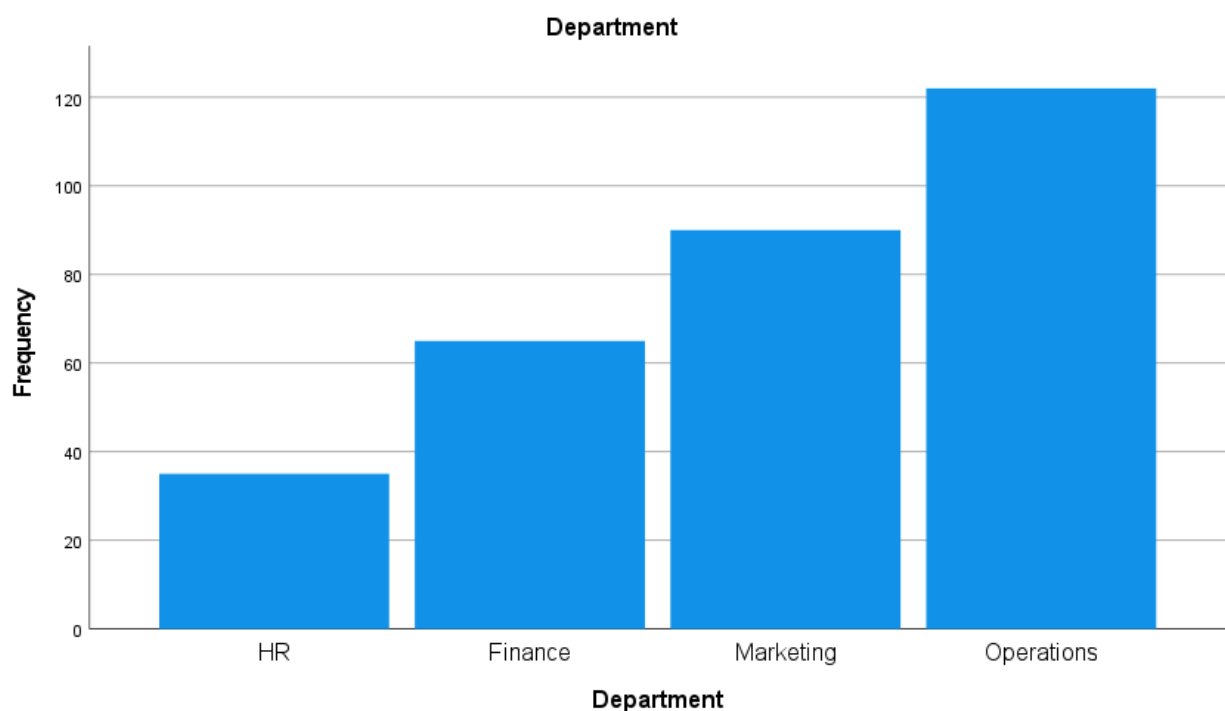
|       |                   | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|-------|-------------------|-----------|---------|---------------|-----------------------|
| Valid | Senior Management | 135       | 43.3    | 43.3          | 43.3                  |
|       | Middle Mnagaement | 151       | 48.4    | 48.4          | 91.7                  |
|       | Lower Management  | 26        | 8.3     | 8.3           | 100.0                 |
|       | Total             | 312       | 100.0   | 100.0         |                       |



**Figure 4-4: Job Title of respondents**

The distribution of respondents across the departments mirrors the distribution of participation across some of the main functional areas of organizations, thus providing a good coverage of diversity in relation to organizational participation. The highest number of respondents are from the operations (39.1%), marketing (28.8%), finance (20.8%) and human resources (11.2%) areas. This distribution suggests that the operational and marketing sections contribute the majority of results, whereby these departments should have more employees and be more involved in the activities of the organization on a day-to-day basis. The different departmental representation adds to the impact and strength of the study as it includes views from operational departments and support departments. Finally, the departmental profile is used to avoid a single functional area focus assisting in making the study's findings more generalizable and relevant to other organizational profiles.

|       |            | Department |         |               |                    |
|-------|------------|------------|---------|---------------|--------------------|
|       |            | Frequency  | Percent | Valid Percent | Cumulative Percent |
| Valid | HR         | 35         | 11.2    | 11.2          | 11.2               |
|       | Finance    | 65         | 20.8    | 20.8          | 32.1               |
|       | Marketing  | 90         | 28.8    | 28.8          | 60.9               |
|       | Operations | 122        | 39.1    | 39.1          | 100.0              |
|       | Total      | 312        | 100.0   | 100.0         |                    |



**Figure 4-5: Department of respondents**

### 4.3. Descriptive summary of variables

Descriptive statistics are given in Table 4-2 to give an overview of the central tendency and distribution of all key study variables (EE, JS, TL, TRL, and PS). The constructs were assessed on a 5 point Likert Scale with the results showing a general positive perception on respondents' side as all the variables had a mean score above the Scale midpoint (3.0). The highest mean is observed for JS ( $M = 3.5256$ ), followed closely by EE ( $M = 3.5093$ ), PS ( $M = 3.4029$ ), TRL ( $M = 3.3952$ ), and TL ( $M = 3.3640$ ). Overall, these results highlight moderate to high

satisfaction, engagement, leadership perceptions and perceived performance amongst respondents. If the mean values of all constructs are relatively close, then there is a sense of consistency among the respondents' perceptions. Finally, with respect to variability, TRL has the highest standard deviation (SD = 1.03504), meaning that the level of dispersion in the responses was relatively high, while the lowest level of dispersion was that of PS (SD = 0.84373), which means that the responses are relatively consistent in terms of perception of PS. EE and JS too have moderate variations which suggest a decent variation in opinion among the respondents. The skewness for all the variables are negative ranging from -0.719 to -0.459, signifying a slight left skewness with the majority of responses focused towards higher levels of agreement. In the same way, the kurtosis for all constructs are negative and not significantly different from a normal curve in social science research. Overall, the data found to be well-distributed, in the normal limits and appropriate to carrying out inference like correlation, regression and mediation analysis. Uniformity among the values further increases the reliability of later statistical analyses.

**Table 4-2: Descriptive summary of variables**

| Descriptive Statistics |           |           |           |           |                |           |            |           |            |
|------------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
|                        | N         | Minimum   | Maximum   | Mean      | Std. Deviation | Skewness  |            | Kurtosis  |            |
|                        | Statistic | Statistic | Statistic | Statistic | Statistic      | Statistic | Std. Error | Statistic | Std. Error |
| EE                     | 312       | 1.00      | 5.00      | 3.5093    | 1.00741        | -.719     | .138       | -.489     | .275       |
| JS                     | 312       | 1.00      | 5.00      | 3.5256    | .98073         | -.459     | .138       | -.766     | .275       |
| TL                     | 312       | 1.11      | 5.11      | 3.3640    | .91025         | -.470     | .138       | -.665     | .275       |
| TRL                    | 312       | 1.00      | 5.00      | 3.3952    | 1.03504        | -.483     | .138       | -.693     | .275       |
| PS                     | 312       | 1.36      | 4.93      | 3.4029    | .84373         | -.539     | .138       | -.539     | .275       |
| Valid N (listwise)     | 312       |           |           |           |                |           |            |           |            |

#### 4.4. Correlation analysis

The relationships among EE, JS, TL, TRL, and PS are analysed using the correlation analysis that is provided in Table 4-3. Based on the observed results, there is a positive and significant correlation between all variables at 0.01 level ( $p < 0.01$ ) which shows that the variables are

significantly associated and meaningful. However, the correlation with EE is weak to moderate positive for starting with EE ( $r = 0.515$ ), suggesting that high JS is linked to high EE. EE also has a high correlation with TL ( $r = 0.723$ ) which shows that TL is an important variable to improve EE performance. The highest value ( $r = 0.889$ ) is between TRL and EE, showing a very strong correlation between TRL and EE. EE also has a good positive correlation with PS ( $r = 0.755$ ), which means that better EE are associated with better PS. JS is positively correlated with TL ( $r = 0.600$ ), TRL ( $r = 0.526$ ), and PS ( $r = 0.766$ ). Of these, the most significant association is between JS and PS where greater JS is associated with greater PS. In this way, it can be seen that within the scope of mental constructs playing an important role in organizational outcomes, JS is an important factor.

The moderate correlation between JS and TL is also indicative that the TL contributes positively to improve JS. The relationships between TL and TRL ( $r = 0.812$ ) and TL and PS ( $r = 0.959$ ) are very strong. The TL and PS do have the highest correlation in the whole matrix, which signifies that TL is a very important indicator that can be used to calculate or understand PS in the dataset. With this extremely strong correlation, any improvement in TL seems to be correlated with improving PS. Also, PS showed a modest correlation with TRL ( $r = 0.851$ ), showing that the structured or transaction aspect of leadership has an important effect on the results of performance. The strong correlation of its relationship with EE ( $r = 0.889$ ), in addition, indicates that TRL is one of the significant variables in affecting EE levels in the organization. Overall, the correlation results validate the theoretical assumptions of this study as all variables are found to be interrelated in a positive manner.

However, TL and PS showed a high correlation ( $r = 0.959$ ) as well as EE and TRL ( $r = 0.889$ ) might create a problem of multicollinearity in the regression model and mediation model, respectively. Regardless of this, the outcomes confirm the conceptual structure, the style of leadership, JS, and EE are all significantly related to PS.

**Table 4-3: Correlations of variables**

|    |                     | Correlations |        |        |        |        |
|----|---------------------|--------------|--------|--------|--------|--------|
|    |                     | EE           | JS     | TL     | TRL    | PS     |
| EE | Pearson Correlation | 1            | .515** | .723** | .889** | .755** |
|    | Sig. (2-tailed)     |              | .000   | .000   | .000   | .000   |
|    | N                   | 312          | 312    | 312    | 312    | 312    |

|     |                     |        |        |        |        |        |
|-----|---------------------|--------|--------|--------|--------|--------|
| JS  | Pearson Correlation | .515** | 1      | .600** | .526** | .766** |
|     | Sig. (2-tailed)     | .000   |        | .000   | .000   | .000   |
|     | N                   | 312    | 312    | 312    | 312    | 312    |
| TL  | Pearson Correlation | .723** | .600** | 1      | .812** | .959** |
|     | Sig. (2-tailed)     | .000   | .000   |        | .000   | .000   |
|     | N                   | 312    | 312    | 312    | 312    | 312    |
| TRL | Pearson Correlation | .889** | .526** | .812** | 1      | .851** |
|     | Sig. (2-tailed)     | .000   | .000   | .000   |        | .000   |
|     | N                   | 312    | 312    | 312    | 312    | 312    |
| PS  | Pearson Correlation | .755** | .766** | .959** | .851** | 1      |
|     | Sig. (2-tailed)     | .000   | .000   | .000   | .000   |        |
|     | N                   | 312    | 312    | 312    | 312    | 312    |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### 4.5. Construct's reliability through Cronbach alpha

Cronbach's Alpha is used to measure the internal consistency of the various measurement scales employed for EE, JS, TL, TRL, and PS, as presented in the reliability analysis shown in Table 4-4. The reliability of a quantitative research is very important that it will be sure that each measure item will cover the specific construct that it is measuring. These findings showed that the EE has good reliability, in the Cronbach's Alpha test of 11 items 0.920. This is greater than the recommended score of 0.7 which indicates a very high internal consistency amongst EE items. It verified a high level of consistency among the items used to assess EE and a successful measurement of the same construct. Additionally, the results for the Cronbach's alpha reliability of TL were very good with a value of 0.879 across 9 items. This proves good internal consistency and further proves that the TL scale is reliable for further statistical analysis. Then TRL has also high reliability value (0.899) in 5 items, implying high consistency level of TRL measurement scale which is good for analysis. PS has also good reliability (Cronbach's alpha 0.889 from 7 items). This shows reliability of the PS scale and that all the items measure the same construct. Therefore, PS can be confidently used in further regression and mediation analyses. On the other hand, JS has a moderate Cronbach's alpha value of 0.653 with 3 items. While a bit low, at 0.70, than the more familiar threshold of 0.70, it is acceptable standards of exploratory research, especially when there are a few objects. As there are only 3 items for JS measurement, lower reliability expected as less item redundancy. The value reflects, however, moderate internal consistency and is acceptable for further analysis, but with caution. In general, the reliability test shows that most of the constructs have good to very good internal

consistency which proves that the measurement model is valid. JS has comparatively less reliability but falls within the limits of acceptable reliability of social science research. Thus, the scales employed in this study are reliable and suitable for further statistical analyses such as correlation and regression as well as mediation test.

**Table 4-4: Reliability of constructs**

| <b>Construct</b> | <b>Cronbach's Alpha</b> | <b>N of Items</b> |
|------------------|-------------------------|-------------------|
| EE               | 0.920                   | 11                |
| JS               | 0.653                   | 3                 |
| TL               | 0.879                   | 9                 |
| TRL              | 0.899                   | 5                 |
| PS               | 0.889                   | 7                 |

#### **4.6. Factor loadings through rotated component matrix**

The rotated component matrix listed in Table 4-5 includes the factor loadings of all the measurement items derived from the Principal Component Analysis (PCA) using Varimax rotation. The results indicate construct validity because the items of EE, JS, TL, TRL and PS are well collated into their own construct. Similarly, for EE, all the items had a high factor loading ranging from 0.640 to 0.850 for Component 1. The loading values are highest for EE11 (0.850) and lowest for EE5 (0.640). There was minor variation across the loadings but none of them fell below the recommended value of 0.50, indicating that EE items are highly related to the underlying construct. JS items load into component 4 at a high level (.764 to .832). This means that JS is a unique construct and it has high and stable scale parameters on all items, hence high convergent factorial validity. The values of the TL items are between 0.662 and 0.823 when loaded onto COMPONENT 3. The highest loading value is TL5 (0.823), the lowest being TL7 (0.662). All values, however, stay below the acceptable value and indicate a clear-cut construct of TL. The values of TRL range between 0.657 and 0.842 for the items loaded in the Component 2. The highest was TRL4 (0.842) where there was strong representation of the

construct. Construct reliability is indicated by acceptable to strong loadings for all items. PS items have high loadings ranging from 0.841 to 0.947 on Component 5. The best convergent validity for PS is seen in PS2 and PS5 (0.947). Looking at the rotated component matrix, overall, a clear 5-factor structure based on EE, JS, TL, TRL, and PS is revealed. The cross loading of the items is not significant, reinforcing the discriminant validity of the measures. The results indicate all constructs are independent, properly operating, and adequate for further statistical analysis such as regression and mediation testing.

**Table 4-5: Rotated component matrix factor loadings**

| Rotated Component Matrix <sup>a</sup> |           |   |      |      |   |
|---------------------------------------|-----------|---|------|------|---|
|                                       | Component |   |      |      |   |
|                                       | 1         | 2 | 3    | 4    | 5 |
| EE1                                   | .728      |   |      |      |   |
| EE2                                   | .736      |   |      |      |   |
| EE3                                   | .770      |   |      |      |   |
| EE4                                   | .726      |   |      |      |   |
| EE5                                   | .640      |   |      |      |   |
| EE6                                   | .661      |   |      |      |   |
| EE7                                   | .651      |   |      |      |   |
| EE8                                   | .690      |   |      |      |   |
| EE9                                   | .685      |   |      |      |   |
| EE10                                  | .809      |   |      |      |   |
| EE11                                  | .850      |   |      |      |   |
| JS1                                   |           |   |      | .832 |   |
| JS2                                   |           |   |      | .764 |   |
| JS3                                   |           |   |      | .815 |   |
| TL1                                   |           |   | .806 |      |   |
| TL2                                   |           |   | .786 |      |   |
| TL3                                   |           |   | .757 |      |   |
| TL4                                   |           |   | .780 |      |   |
| TL5                                   |           |   | .823 |      |   |
| TL6                                   |           |   | .784 |      |   |

|      |  |      |      |  |      |
|------|--|------|------|--|------|
| TL7  |  |      | .662 |  |      |
| TL8  |  |      | .709 |  |      |
| TL9  |  |      | .788 |  |      |
| TRL1 |  | .702 |      |  |      |
| TRL2 |  | .680 |      |  |      |
| TRL3 |  | .657 |      |  |      |
| TRL4 |  | .842 |      |  |      |
| TRL5 |  | .781 |      |  |      |
| PS1  |  |      |      |  | .942 |
| PS2  |  |      |      |  | .947 |
| PS3  |  |      |      |  | .894 |
| PS4  |  |      |      |  | .841 |
| PS5  |  |      |      |  | .947 |
| PS6  |  |      |      |  | .894 |
| PS7  |  |      |      |  | .841 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

## 4.7. Hypothesis testing through regression analysis

The results of regression analysis are shown in Table 4-6 and they are multiple linear regression with TL and TRL as regressors and JS as the regressionate. The results provide insight into the extent to which leadership styles explain variations in JS among respondents. The Model Summary shows the regression model has an R (correlation coefficient) value of 0.604, which represents a fairly good positive correlation between independent variables and JS (TL and TRL). The R Square (36.5%) value revealed that only 36.5% of the variation in JS is explained by TL and TRL together. This suggests that leadership style is a key determinant of JS, but there are other uninvestigated factors which influence JS. With an Adjusted R Square of 0.360, which means the model is statistically sound and not over-parameterized by irrelevant variables, the model is stable, reliable and appropriate. The standard error of the estimate (0.78434) also shows a reasonably good level of prediction accuracy. The overall significance of the model is tested with the ANOVA results. The value of the F obtained is 88.620, while the values of  $p \leq 0.001$  indicate that the regression model is statistically significant. The two

models TL and TRL together are important to predict JS, which confirms and the model fits better than only the intercept model. Thus, the regression model can be used in testing hypothesis and further interpretation. The Coefficients table contains detailed information on how the individual TL and TRL factors affect JS. TL has a positive and statistically significant effect on JS with a coefficient of the unstandardized regression coefficient (B) = 0.547, a standardized regression coefficient (Beta) = 0.508 and a t-value = 6.532 ( $p < 0.001$ ). This means that there was a 0.547 unit rise in JS for each additional unit rise in TL (with TRL remaining constant). The relatively high value of beta indicates that TL is the most important contributor in the model, which shows the importance of TL in improving JS.

The current result corroborates the theoretical assumption that motivating-the-see employee is expected to positively affect employees' attitudes and satisfaction through inspiration, support and a positive workplace environment. In contrast, TRL has a significant positive correlation with JS albeit at a low level. The coefficient for TRL is 0.108 with a beta value of 0.114 and a t-value of 1.462, which is not significant at the 0.05 level ( $p = 0.145$ ). This suggests that the direct impact of TRL is limited in this model with respect to JS. The relationship is positive but is not statistically significant and is weak. This indicates that transactional or role-based leadership related practices do not have a significant impact on employee satisfaction level with TL in the model. It can also suggest that employees feel more motivated and inspired when their leaders are motivational and inspirational, but not task-oriented.

The constant value 1.320 is the initial value of JS for TL = 0 and TRL = 0. This value, although statistically significant, is a reference value and does not have substantive interpretation. The overall implementation of the regression model showed that the hypothesis of TL and JS are accepted in part, the hypothesis of TRL and JS is not accepted and the hypothesis of JS and TS are accepted in part. In particular, TL is seen to have a large positive impact on JS, while TRL shows no significant impact. Findings emphasize the significance of transformational leadership on determining the employee satisfaction in the organizational environment. These results also lay the groundwork for further mediation analyses, which would suggest that JS would be a factor in shaping other outcome measures: EE and PS. The explanatory power effect of TL is stronger which is why it comes to the fore in the research context of this research.

**Table 4-6: Linear Regression TL, TRL on PS**

### Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .604 <sup>a</sup> | .365     | .360              | .78434                     |

a. Predictors: (Constant), TRL, TL

### ANOVA<sup>a</sup>

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1     | Regression | 109.035        | 2   | 54.518      | 88.620 | .000 <sup>b</sup> |
|       | Residual   | 190.093        | 309 | .615        |        |                   |
|       | Total      | 299.128        | 311 |             |        |                   |

a. Dependent Variable: JS

b. Predictors: (Constant), TRL, TL

### Coefficients<sup>a</sup>

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
|       |            | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant) | 1.320                       | .172       |                           | 7.691 | .000 |
|       | TL         | .547                        | .084       | .508                      | 6.532 | .000 |
|       | TRL        | .108                        | .074       | .114                      | 1.462 | .145 |

a. Dependent Variable: JS

The path analysis effects shown in the mediation analysis of Table 4-7 utilized growth model 4 of PROCESS with 5,000 bootstrapped resamples. The results clearly show whether EE is serving as a mediating linkage between the independent variables and PS. Based on the results, the TL (independent variable) had a strong positive influence and was significantly affected by EE (dependent variable) for the first model (TL → EE → PS) with a value of 0.8002 and a significant level of  $p < 0.001$ . In turn, EE also has a significant positive effect on PS ( $b = 0.1079$ ,  $p < 0.001$ ). The value for the indirect effect ( $a \times b = 0.0863$ ) is positive and statistically significant because the bootstrapped confidence interval (0.0511 to 0.1203) does not include zero. Furthermore, the connection between TL and PS is still important ( $c' = 0.8025$ ), suggesting that EE acts as a partial mediator between TL and PS. This implies that TL can have

direct or indirect boost on PS by the improvement of EE. In the second model,  $TRL \rightarrow EE \rightarrow PS$ , TRL shows a strong positive effect on EE ( $a = 0.8656$ ,  $p < 0.001$ ).

In this model EE is not a significant predictor of PS ( $b = -0.0086$ ,  $p > 0.05$ ). Going by the indirect effect the result is negative and insignificant ( $a \times b = -0.0075$ ,  $CI = -0.1063$  to  $0.0871$ ). The effect of TRL on PS is quite high, with  $c'$  of  $0.7014$ , but there is no significant indirect effect means that EE does not mediate between TRL and PS. The interpretation of this is that the influence of TRL on EE is not a mediating effect, but is direct; TRL has no effect on the performance outcome via EE. In the third model,  $JS \rightarrow EE \rightarrow PS$ , JS significantly predicts EE ( $a = 0.5292$ ,  $p < 0.001$ ), and EE strongly predicts PS ( $b = 0.4106$ ,  $p < 0.001$ ). The indirect effect ( $a \times b = 0.2173$ ) is significant and positive ( $0.1689$  to  $0.2675$  does not contain 0). Direct effect of JS on PS is also found to be significant ( $c' = 0.4419$ ), thus confirming partial mediation.

This means that JS has a direct and indirect link with PS, and EE is a notable mediator in this link. Overall, the mediation analysis results are inconclusive. The relationships of TL and JS with PS were significantly mediated by EE, but not between TRL and PS. The results indicate EE playing a pivotal position as a psychological construct between leadership and satisfaction and their effects on performance. Of all variables, chið serves as the greatest mediator between engagement and PS, indicating that it is the strongest influence of engagement on PS.

**Table 4-7: Summary of Mediation Analysis (EE as Mediator)**

| Path          | X → M<br>(EE)<br>Coefficient | M → Y<br>(PS)<br>Coefficient | Direct<br>Effect ( $c'$ ) | Indirect<br>Effect<br>( $a \times b$ ) | Boot<br>LLCI | Boot<br>ULCI | Mediation<br>Decision                          |
|---------------|------------------------------|------------------------------|---------------------------|----------------------------------------|--------------|--------------|------------------------------------------------|
| TL → EE → PS  | 0.8002***                    | 0.1079***                    | 0.8025***                 | 0.0863                                 | 0.0511       | 0.1203       | Partial mediation<br>(significant<br>positive) |
| TRL → EE → PS | 0.8656***                    | -0.0086<br>(ns)              | 0.7014***                 | -0.0075                                | -<br>0.1063  | 0.0871       | No mediation (not<br>significant)              |
| JS → EE → PS  | 0.5292***                    | 0.4106***                    | 0.4419***                 | 0.2173                                 | 0.1689       | 0.2675       | Partial mediation<br>(significant<br>positive) |

This chapter of the thesis provided an in-depth, empirical examination of the current study variables: EE, JS, TL, TRL, and PS. Demographic profiles of the respondents were analysed

first followed by descriptive statistics, correlation analysis, reliability testing, factor analysis, regression analysis and mediation testing.

The findings as a whole indicate reliability and validity of the measurement scales and generally support the assumed relationships between the variables. The results of the regression analysis indicated that TL significantly predicts JS, but that TRL has no significant effect.

This study found strong and significant correlations between all constructs as revealed by the correlation analysis. Reliability analysis yielded high internal consistency for all variables with a few exceptions which were still acceptable for JS. The construct structure was confirmed by factor analysis, and showed good loading and cross-loading characteristics. Lastly, the partial mediation obtained in a mediation analysis for TL-PS and JS-PS and the lack of mediation found for TRL-TL revealed, respectively, that EE mediated the relationships of TL and JS with PS, but not of TRL with TL. The results of the study show that EE is one of the crucial factors in converting TL and JS into PS under a theoretical framework.

**Table 4-8. Summary of Associations and Hypothesis Testing Results**

| <b>Relationship / Hypothesis</b> | <b>Analysis Type</b> | <b>Result</b>               | <b>Key Statistic</b> | <b>Decision</b> |
|----------------------------------|----------------------|-----------------------------|----------------------|-----------------|
| TL → JS                          | Regression           | Significant positive effect | B = 0.547, p < 0.001 | Supported       |
| TRL → JS                         | Regression           | Not significant             | B = 0.108, p = 0.145 | Not supported   |
| EE ↔ JS                          | Correlation          | Significant positive        | r = 0.515**          | Supported       |
| EE ↔ TL                          | Correlation          | Strong positive             | r = 0.723**          | Supported       |
| EE ↔ TRL                         | Correlation          | Very strong positive        | r = 0.889**          | Supported       |
| EE ↔ PS                          | Correlation          | Strong positive             | r = 0.755**          | Supported       |
| TL ↔ PS                          | Correlation          | Very strong positive        | r = 0.959**          | Supported       |
| TRL ↔ PS                         | Correlation          | Strong positive             | r = 0.851**          | Supported       |
| JS ↔ PS                          | Correlation          | Strong positive             | r = 0.766**          | Supported       |

|               |           |                   |                                       |               |
|---------------|-----------|-------------------|---------------------------------------|---------------|
| TL → EE → PS  | Mediation | Partial mediation | Indirect = 0.0863 (CI: 0.0511–0.1203) | Supported     |
| TRL → EE → PS | Mediation | No mediation      | Indirect = -0.0075 (CI includes 0)    | Not supported |
| JS → EE → PS  | Mediation | Partial mediation | Indirect = 0.2173 (CI: 0.1689–0.2675) | Supported     |

## 4.8. Chapter summary

The study presented was detailed empirical analysis of the study, which had built upon the data collected from the 312 respondents. The analysis was designed in a systematic fashion starting with the demographic profiling, descriptive statistics, correlation analysis, reliability analysis, factor analysis, regression analysis and mediation analysis. The analysis for each stage added to the development of a holistic view of EE, JS, TL, TRL, and PS. The demographic analysis showed a representative balance of male / female, age, work experience, job title and representation of departments. This diversity enhances the generalizability of the results across the range of employee groups.

Descriptive statistics also revealed mean points above the neutral point, implying respondents' perceptions of responses were generally positive with respect to the leadership, engagement, satisfaction, and performance constructs. Skewness and kurtosis values were found within the acceptable limits in the distribution of data representing normal limits of skewness and kurtosis of data, which were acceptable for further parametric analysis. All the study variables were found to be significant and positive with each other by correlation analysis. In particular, strong association between TL and PS was found, as well as between EE and TRL, pointing to strong interdependencies among constructs. The internal consistency (Cronbach's alpha) was good for most constructs (except the JS construct which had moderate items) with reliability generally exceeding 0.8 for EE, TL, TRL, and PS.

The factor analysis further supported the measurement model consistency for a clear structure with high loadings without large cross-loadings on factors for concurrent and divergent validity. The regression analysis showed that TL significantly contributes to predict JS, while TRL does not have a significant impact on JS. This indicates that the aspects of transformational leadership have more of an impact on employee satisfaction than does

transactional or role-oriented leadership. Moreover, mediation analysis performed using the study's PROCESS Model 4 showed that EE is significant mediator in the TL and JS relationship with PS. In turn, both TL and JS indirectly and directly—influence PS through EE, suggesting partial mediation effects. The indirect effect of TRL was not significant, however, no mediation was found. Results from the study as a whole support the unitary premise that EE is a key psychological variable that links leaders and satisfaction to better performance outcomes. The findings are deemed as strong evidence that supports the formulated theory of the study and underlines the role played by TL and JS successfully using EE to improve organizational performance. In the next chapter these findings are a solid basis for interpretation, discussion and implications.

## **CHAPTER 5: DISCUSSION AND CONCLUSION**

### **5.1. Introduction**

This chapter will extensively discuss the major results relevant to the aim(s) and hypothesis (hypotheses) of the study. It analyzes the results of the empirical work presented in Chapter 4 and provides connections with the theory and the relevant literature. This chapter aims at analysing whether the following link between the agreed relationships of TL, TRL, JS, EE and PS is backed up by the data and giving meaningful explanations of the outcomes. This discussion starts with RO1, which talks about the effect of TL on PS. The results are discussed with respect to direct and indirect impact and the role that leadership style plays in determining outcomes of organizations. The aim of RO2 is to gain insights into TRL and to have the opportunity to compare the differences between transformational and transactional approaches to leadership.

The psychological and motivational component of employee attitudes is also crucial for project outcomes, as discussed in RO3, which focuses on how JS affects these PS factors. Moreover, a mediation model is presented between leadership styles/EE and JS/PS in IF RO4 and RO5. In addition, a mediation model is provided between leadership styles and EE/JS/PS in IF RO4 and RO5. This is especially so because these goals address the mechanism that leads from Leadership and Satisfaction to Project Success. The mediation results offer a greater understanding of how EE is a psychological process identified as a pathway to improve performance outcomes in organizations. Alongside the research aim, this chapter is also developed to highlight the theoretical implications of the findings and how this is related to any existing leadership and organizational behaviour theories.

The managerial implications are also discussed to offer practical lessons for organizational leaders and policy makers on how to make leadership more effective, employee more satisfied and more engaged in their work to boost project success. Lastly, the chapter details the study's limitations, recognizing methodological and contextual constraints that could impact the generalizability of the findings. Based on these limitations, recommendations for future research to guide future research are also provided. In general, this chapter acts as a link between empirical results and theoretical analysis, and in addition to explaining the results in

detail, it is an analysis of the academic value of the results as well as their practical value in organizational behaviour and project management.

## **5.2. RO1: To examine the impact of transformational leadership on project success.**

As revealed from the results of the present study, there exists a good and significant positive association between TL and PS both directly and indirectly via EE. That finding aligns with the already published research in the field of leadership that is in consensus about TL's significant importance in improving the outcomes at the organization and project level (Iqbal et al., 2019). TL embodies vision, inspiration, intellectual stimulation and individualized attention, and it has consistently been seen as a key motivator and effectiveness engine in organizations. This linkage since the past has been established by a large number of studies. According to research in organizational behaviour, TL is found to boost employee commitment, creativity, and motivation, thereby elevating the task performance and project results. Transformational leaders can help match personalized objectives with organizational goals, which enhances team coordination, communications, and team purpose (Prabhakar, 2005).

The nature of project environments makes co-operation and flexibility even more crucial to success, and this is where this alignment comes to play a significant part. According to the social exchange theory in this study, it is found that there is a strong relationship between TL and PS, meaning that positive behaviours of TL are followed by the efforts and performance of employees (Zhao et al., 2021). Employees that feel supported and inspired by their leaders are likely to have increased engagement and commitment towards project objectives. This helps in enhancing the project's efficiency, quality, and timely completion resulting in direct and tangible benefits to the project. Moreover, TL also indirectly affects PS through engagement, suggesting engagement plays a key psychological mediation mechanism in this relationship. This supports earlier research that shows more engaged employees are more productive, attuned, and willing to do more than what's expected of them! Hence, TL has a direct influence on performance as well as have an indirect influence by promoting internal motivational state to achieve better results. In more practical terms, the results indicate that strengthening managers' TCL should be a key concern of any organization to increase project success. Project outcomes can be greatly enhanced by leadership training that emphasizes

communication, vision building and the empowerment of employees. Across all items, RO1 is well supported, establishing that in the context of organizations, TL is an important predictor of PS.

### **5.3. RO2: To assess the effect of transactional leadership on project success.**

The results for the TRL show a positive, but not as strong and consistent relationship with PS as TL. Using regression and mediation analyses, it is evident that the relationship between TRL and PS is mostly direct and is not mediated by EE, although a strong positive correlation is observed. This emphasises the perspective of limited utility of TRLs in terms of how they increase project benefits (Olasunkanmi et al., 2024). Previous research has focused on describing TRL as a structured task, a defined role, systems of monitoring performance, and systems of rewards or sanctions. This is when pay-off or supportive feedback is given to employees to encourage them (TAKEED et al., 2024). The literature indicates that TRL is effective in short-term goal setting, maintaining routine performance, and compliance to organizational standards. But unlike TL, psychological and motivational factors, like EE, are not strongly influenced by TRL. This is consistent with the methodologies observed in leadership and literature related to the topic that imply transactional orientation is more of a control type and less effective in encouraging the intrinsic drive.

Consequently, TRL does not necessarily increase higher levels of emotional attachment or engagement to work, but may only be able to assure the accomplishment of the task and efficiency of operations. This view is again endorsed by the findings of this research which did not reveal any significant indirect relationship between TRL and PS through EE. This indicates that while TRL might help to facilitate project implementation, it does not have a motivational impact. While employees can comply with TRL and do not necessarily commit to it, this speaks to its low predictability in influencing the range of employee behaviours that influence performance outcomes (Cserhati & Schimmer, 2025). On a practical level, TRL continues to play a crucial role in situations where clarity, supervision, and performance monitoring are critical, especially in structured environments (Rehan et al., 2025). The use of TRL alone, though, may not be adequate for attaining high PS levels, especially in dynamic and complex project environments. To achieve the best results, organizations will likely need to use TRL along with other more inspirational leadership techniques.

### **5.4. RO3: To evaluate the influence of job satisfaction on project success.**

Based on the results of the current study, it is concluded that there is a significant and positive relationship between JS and PS; directly and indirectly via EE. This means that workers who have a greater sense of satisfaction will be more likely to make a positive contribution to project outcomes. JS is playing an important role in the attitude, purposes and eagerness to go above and beyond what is required of them to perform their occupations. Previous extensive studies have shown the significance of JS on organizational performance (Rezvani et al., 2016). Happy workers are more committed, less likely to leave and more likely to perform discretionary work behaviours. These behaviours are vital in a project-driven setting where teamwork, problem-solving and flexibility is key to success. The findings from this study are also consistent with the partial mediation effect of EE between JS and PS. This indicates that happy workers are more inclined to be involved with their work and that involvement ultimately helps to improve project performance (Fareed et al., 2022). This discovery is consistent with the engagement theory that highlights the importance of experiencing emotion and cognition toward work as a bridge to explain positive job attitudes to job performances.

Furthermore, JS is not only a determinant of behaviours, it also affects psychological factors like intention, motivation and organizational identification. Employees who approve and think that they get a fair deal when it comes to their working environment, wage, management, and progression courses are more inclined to invest their exertion and energy into their undertakings. This additional investment boosts productivity and project results. But the translation of JS into active engagement is not enough to guarantee high PS (Sajid et al., 2024). This is because EE is a crucial mediator in this relationship. However, being happy at work is not the same as being engaged in the work, unless the business culture promotes participation, appreciation, decision making etc.

The immediately relevant conclusions derived from the findings are two-folded: The first is to emphasize the need for improving JS through fair policies, supportive leadership, and good working environment within organizations; and the second is to derive strategies that can enhance the attainment of this improvement. Meanwhile, they must strive to make satisfaction actual engagement by designing meaningful work and by implementing participative management. Overall, the results lend strong support to RO3 (javascript being a significant predictor of PS) with the effect of RO3 being further boosted when mediated by EE.

Overall, RO3 is strongly supported, confirming that JS is a significant predictor of PS, and its impact is strengthened when mediated through EE.

### **5.5. RO4: To investigate the role of employee engagement as a mediator between leadership styles and project success.**

The insights gained from this research support the strong link between EE and PS, as well as between leadership styles and EE, and presented evidence of EE being a significant mediating variable. Specifically, the relationship between TL and PS is partially mediated by EE; but, the relationship between TRL and PS is not mediated by EE. This suggests that EE is a prime psychological mechanism that has been revealed in the process of finding how some leadership behaviours are converted into better project results (Hussain, 2022). The idea of the mediating role of EE has received a significant number of supports from organizational behaviour literature. A typical definition of EE is the amount of emotional, intellectual, and behavioural contribution that they make to their jobs. Leadership style is found to have a significant impact on EE based on other studies which explain how the leadership style affects employee's perception of support, motivation and meaningfulness in work (McKevitt et al., 2022). TL has been documented as being highly effective in improving EE in specific ways, such as in its capacity to motivate employees, to spark intellectual stimulation and to generate purpose. These leadership styles establish an atmosphere in which people feel appreciated and inspired to go the extra mile in their work. This study support this theoretical viewpoint: that the results obtained indicate a strong positive relationship between TL and EE, and that EE is related with a significant effect to PS. This means that the relationship between engaged employees and work results is a bridge. High employee engagement equates to higher commitment, collaboration, productivity, and successful project outcomes.

In this context, EE can be thought of as a booster system to the effect of leadership on performance. In this sense, EE can be regarded as an amplifier to the effect of leadership on performance. However, no significant indirect effect is observed in a mediated path via EE between TRL and respondents' behaviour. Positive TRL has a significant impact on EE early on, but it does not necessarily produce engagement leading to improved PS (Castro et al., 2022). This implies that the involvement process of TRL is more on task structuring than psychological path. Compliance with rules and with expectations may be one way for employees to engage with TRL, however, this does not necessarily result in an increased emotional or cognitive engagement in their work.

The results of this study are somewhat similar to the earlier research which has classified leadership styles in two categories: motivational and controlling. Transactional leadership styles relationship and task oriented typically do not encourage EE, whereas motivational styles (TL) are more likely to positively support EE. In a pragmatic sense, the results indicate that organizations should put EE as a strategic priority. Managers need to be supported by the leadership development program to undertake transformational behaviours to improve employee motivation and engagement (Braun & Avital, 2007). This will eventually reduce PS to a betterment, as engaged employees will be more likely to positively contribute towards the project goals. In summary, RO4 is partially supported, which means that EE has a crucial mediating role between TL and PS; however, this role does not exist for TRL.

### **5.6. RO5: To explore the mediating effect of employee engagement between job satisfaction and project success.**

This strong relationship between JS and EE has been established in the past. However, a high percentage of those happy with their job circumstances, pay, supervisors, relations at work, are much more likely to feel more emotionally attached to their position. This emotional bond fosters increased engagement, resulting in greater productivity, improved teamwork, and better performance results (Ibrahim & Hussein, 2024). This theoretical foundation is strongly supported by the results of this study. Results show that JS is a significant predictor of EE and EE is in turn a significant predictor of PS, further affirming that engaged employees serve as an important pathway between satisfaction and performance. It suggests that, without being turned into high involvement and engagement, high PS is not guaranteed by JS alone. While satisfied workers are likely to do what they are normally paid to perform, engaged workers display the inclination "to go the extra mile" and enthusiastically help with the success of the project. The partial mediation effect implies that there is a direct pathway of the influence of JS on PS as well, such that satisfaction affects performance directly and through additional direct motivational, or attitudinal, pathways (Ramirez-Lozano et al., 2023). But the indirect route via EE is an important pathway and it is imperative to involve EE in enhancing the benefit of JS.

The results corroborate with engagement theory, which argues that EE is a mediator that links the positive feelings about the job with a positive performance. If employees are satisfied, they are likely to be putting their bodies, minds and feelings into their work. An increased

investment will improve efficiency, minimise errors and boost team collaboration for the successful completion of projects. **Manages:** From a managerial perspective, the findings imply that increasing an organisation's need to work on increasing JS is not enough; it is also necessary to increase satisfaction and convert it into EE. This could occur by implementing job enrichment, recognition strategies, participative decision making, and enabling leadership (Iqbal et al., 2023). These can act as a positive means of empowering employees and even boost PS. Overall, the results indicate strong support for RO5, supporting that EE has a prominent role in the mediation between JS and PS. The results point to the role of EE as a key foundational mechanism in organizing positive job attitudes to improve organizational outcomes.

**Table 5-1: Summary of Research Objectives, Findings, and Achievement of Objectives**

| <b>Research Objective</b>                                                                     | <b>Hypothesis/Relationship Examined</b> | <b>Key Statistical Findings</b>                                                                                                                                                                                                     | <b>Objective Achievement</b>        | <b>Discussion Summary</b>                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>RO1: To examine the impact of Transformational Leadership (TL) on Project Success (PS)</b> | TL → PS                                 | Correlation between TL and PS = <b>0.959</b> ( $p < 0.01$ ).<br>Regression coefficient for TL = <b>0.547</b> ( $\beta = 0.508$ , $p < 0.001$ ).<br>Mediation analysis showed significant direct effect ( $c' =$ <b>0.8025</b> ) and | <b>Fully Achieved and Supported</b> | Findings confirm that TL significantly improves PS both directly and indirectly through EE. Leaders who inspire, motivate, and support employees create stronger commitment and better project outcomes. |

|                                                                                            |          |                                                                                                                                                                                                                                                                                                                |                           |                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                            |          | significant indirect effect through EE ( <b>0.0863</b> , CI = 0.0511–0.1203).                                                                                                                                                                                                                                  |                           | Results are consistent with transformational leadership theory and previous empirical studies.                                                                                                                                                                                                    |
| <b>RO2: To assess the effect of Transactional Leadership (TRL) on Project Success (PS)</b> | TRL → PS | Correlation between TRL and PS = <b>0.851</b> ( $p < 0.01$ ).<br>Regression coefficient = <b>0.108</b> ( $\beta = 0.114$ , $p = 0.145$ ).<br>Direct effect significant in mediation model ( $c' = \mathbf{0.7014}$ ), but indirect effect through EE insignificant ( <b>−0.0075</b> , CI = −0.1063 to 0.0871). | <b>Partially Achieved</b> | TRL contributes positively to project performance through task clarification, monitoring, and reward systems. However, its impact is weaker than TL and does not significantly enhance PS through EE. This suggests that TRL is effective for operational control but less effective for creating |

|                                                                                                         |                                   |                                                                                                                                                                                                      |                                     |                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                         |                                   |                                                                                                                                                                                                      |                                     | psychological engagement.                                                                                                                                                                                                                              |
| <b>RO3: To evaluate the influence of Job Satisfaction (JS) on Project Success (PS)</b>                  | JS → PS                           | Correlation between JS and PS = <b>0.766</b> ( $p < 0.01$ ).<br>Direct effect on PS = <b>0.4419</b> ( $p < 0.001$ ).<br>Significant indirect effect through EE = <b>0.2173</b> (CI = 0.1689–0.2675). | <b>Fully Achieved and Supported</b> | Results demonstrate that JS significantly improves PS. Employees who are satisfied with their work environment, rewards, and organizational support are more productive and committed to project objectives. EE further strengthens this relationship. |
| <b>RO4: To investigate the mediating role of Employee Engagement (EE) between Leadership Styles and</b> | TL → EE → PS and<br>TRL → EE → PS | TL significantly predicts EE ( <b>0.8002</b> , $p < 0.001$ ) and EE significantly predicts PS ( <b>0.1079</b> , $p <$                                                                                | <b>Partially Achieved</b>           | EE successfully mediates the relationship between TL and PS but does not mediate the relationship                                                                                                                                                      |

|                                                                                                                                |              |                                                                                                                                                                                                |                                     |                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Project Success (PS)</b>                                                                                                    |              | 0.001). Indirect effect significant ( <b>0.0863</b> ). For TRL, EE did not significantly predict PS ( <b>-0.0086</b> , $p > 0.05$ ).                                                           |                                     | between TRL and PS. This indicates that transformational leaders create engagement that translates into improved project outcomes, whereas transactional leadership primarily influences performance directly. |
| <b>RO5: To explore the mediating effect of Employee Engagement (EE) between Job Satisfaction (JS) and Project Success (PS)</b> | JS → EE → PS | JS significantly predicts EE ( <b>0.5292</b> , $p < 0.001$ ). EE significantly predicts PS ( <b>0.4106</b> , $p < 0.001$ ). Indirect effect significant ( <b>0.2173</b> , CI = 0.1689–0.2675). | <b>Fully Achieved and Supported</b> | EE acts as a strong psychological mechanism linking JS and PS. Employees who are satisfied become more engaged, and this engagement enhances their contribution toward                                         |

|                                   |                                            |                                                                                                                                  |                              |                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   |                                            |                                                                                                                                  |                              | successful project completion.                                                                                                                                                                                                                                                                                      |
| <b>Overall Research Objective</b> | Integrated model of TL, TRL, JS, EE and PS | Significant relationships observed among most variables. EE demonstrated strong mediating effects for TL and JS but not for TRL. | <b>Successfully Achieved</b> | The study successfully validated the proposed framework and demonstrated that leadership styles and job satisfaction influence project success directly and indirectly through employee engagement. EE emerged as a critical psychological mechanism explaining project performance in Saudi Arabian organizations. |

## 5.7. Research Implications

### **5.7.1. Theoretical Implications**

The results in this study have great significance for additions to theories of leadership, employee behaviour and organizational performance. First, findings support the theoretical evidence that, TL has demonstrated a stronger correlation on positive organizational outcomes than TRL and that the PS remain strong when measured in psychological terms like EE. This aligns with theory regarding leadership that promotes inspiration, motivation and employees' empowerment as key factors of performance. Second, the study builds on the JS–performance literature by documenting the direct effects of JS on PS and its mediation role via EE. This is in support of engagement theory which treats EE as one of the psychological states that connect EE and outcomes of performance. Third, the results partially support both mediation models, showing that EE is an important mediating construct in the relationship between leadership and satisfaction and between satisfaction and performance. However, under contrasting non-mediation of the TRL–PS relationship indicates that not all leadership styles function on psychological engagement pathways, introducing a nuance to the currently known leadership theoretical models. In general, the study combines leadership theory, job satisfaction theory and EE in a single framework of explaining PS in organizational environment.

### **5.7.2. Managerial Implications**

The results have practical implications with regard to managers and organizational leaders who want to improve PS. Based on the strong influence of TL, first of all, it is recommended that organizations need to focus on developing the skill to become a transformational leader among managers. Online training courses on vision creation, motivation, communication and empowerment of employees can have a great impact on the employee outcome as well as the efficiency of the projects. Secondly, the findings suggest that the role of JS in enhancing PS is important especially indirectly through EE. Consequently, there is a need to look inward and make the workplace more conducive, fair, recognizing, and career-developing to improve JS. Third, EE appears to be a significant contributor to PS with managers playing an active role in relationship to leadership, significant work design and participative decision making. Also, because of the relatively low level of TRL, single-focused process-oriented or task-oriented leadership may not be enough to produce the desired level of performance outcome. Instead, a program of balanced leadership style composed with structure and motivation is suggested. Overall, managers should aim to build a work environment that is engaging, encourages their

team to feel appreciated, equipped and fulfilled, and, most importantly, is good for project success.

## **5.8. Research Limitations and Future indications**

This study has a number of limitations which must be recognized. First, the research adopted a cross-sectional design, hence, the ability to making causal inferences between TL, TRL, JS, EE and PS was constrained. Longitudinal studies would be better for revealing the trends of these variables over time and for eliciting the causal evidence better. Secondly, the study uses self-reported measures obtained through questionnaires, which could contain common method bias and social desirability bias, and respondents might be self-reporting inaccurate or overly positive answers.

Third, the number of respondents (312) is sufficient for statistical analysis of the data, but may not be representative of respondents from all organizational sectors or cultural setting. So, the extent to which the results found can be extrapolated to other groups should be judged. However, the study conducted presented focus only on five variables as it neglects other variables like organizational culture, technology, resources and external environmental conditions that impact PS. It is recommended that future studies take a longitudinal approach or a mixed method approach to gain more insight into causal relationships.

The model can be further expanded in the future by introducing more variables such as organizational culture, work environment or psychological empowerment to explain PS. The model can also be validated in other industries (or countries) by conducting comparative studies. Further, future studies could analyse the mediating variables like age, experience or organizational type, which can help in determining how these variables can moderate the relationship between leadership and JS, EE and PS. In general, the limitation within this research area could enable the stability and usefulness of future results.

## **5.9. Conclusion**

The relationships between TL, TRL, JS, EE and PS were investigated in this dissertation, based on empirical data gathered from thirty-one hundred and two (312) respondents. The goal of the study was to gain insight into the moderating effect of EE between leadership styles with employee attitudes and PS.

The evidence from the findings clearly shows that TL is one of the major predictor variable for PS both directly and indirectly via EE, and TRL is the lesser predictor variable for PS with little evidence for mediation. The findings are consistent with EE being a pivotal factor in converting positive leadership behaviours and job attitudes to better performance outcomes. Specifically, TL was found to be most influential leadership style with positive impacts on EE, JS, and PS. JS was also linked to PS especially through EE, revealing the critical role of employee attitudes in realizing organizational outcomes. TRL, on the other hand, did not significantly influence pathways to psychological engagement.

The study in general corroborates the theoretical framework and enhances understanding of the relationship between leadership and employee satisfaction and its effect on employee performance. The results highlight the need for EE to be promoted in a sound way in the context of supportive work environments and strong leadership to improve levels of PS. The findings of this study give both theoretical and practical concepts for leadership enhancement and improving employee results for improved project success.

## References

- Abbas, M., & Ali, R. (2023). Transformational versus transactional leadership styles and project success: A meta-analytic review. *European Management Journal*, 41(1), 125-142.
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian journal of medical specialties*, 4(2), 330-333.
- Afzal, F., & Tumpa, R. J. (2024). Exploring leadership styles to foster sustainability in construction projects: a systematic literature review. *Sustainability*, 16(3), 971.
- Aga, D. A. (2016). Transactional leadership and project success: the moderating role of goal clarity. *Procedia Computer Science*, 100, 517-525.
- Ahmed, N., Rehman, A., & Fazil, S. (2025). The impact of total quality management practices on project contract with the mediating role of transformational leadership and the moderating role of job satisfaction. *Journal of Management & Social Science*, 2(2), 50-85.
- Al-Balawneh, K. A., & Tarabieh, S. (2024). The impact of risk management and knowledge management on construction project success: The mediating role of project management performance. *Mutah Journal of Humanities and Social Sciences (MJHSS)*, 39(1).
- Al Najjar, A. S., & Qandeel, M. S. (2025). Operational strategy, capabilities, and successfully accomplishing business strategy. *Journal of Applied Research in Technology & Engineering*, 6(1), 1-11.
- Al Zeer, I., Ajouz, M., & Salahat, M. (2023). Conceptual model of predicting employee performance through the mediating role of employee engagement and empowerment. *International Journal of Educational Management*, 37(5), 986-1004.
- Aldhobaib, M. A. (2025). The new era of the kingdom of Saudi Arabia: key highlights and future research agenda on organizational strategy. *Businesses*, 5(1), 5.
- Ali, I. M. (2024). A guide for positivist research paradigm: From philosophy to methodology. *Ideology Journal*, 9(2).
- AlMarri, M., Al-Ali, M., Alzarooni, M., AlTeneiji, A., Al-Ali, K., & Bahroun, Z. (2025). Enterprise resource planning systems for health, safety, and environment management: Analyzing critical success factors. *Sustainability*, 17(7), 2947.
- Almashhadani, M., & Almashhadani, H. A. (2023). English translations in project management: Enhancing cross-cultural communication and project success. *International Journal of Business and Management Invention*, 12(6), 291-297.
- Ansari, M. S. A., Abouraia, M., El Morsy, R., & Thumiki, V. R. R. (2024). Influence of transformational and transactional leadership on agile project success. *Project Leadership and Society*, 5, 100136.

- Avci, A. (2015). Investigation of transformational and transactional leadership styles of school principals, and evaluation of them in terms of educational administration. *Educational Research and Reviews*, 10(20), 2758-2767.
- Aziri, B. (2011). Job satisfaction: a literature review. *Management research & practice*, 3(4).
- Bagga, S. K., Gera, S., & Haque, S. N. (2023). The mediating role of organizational culture: Transformational leadership and change management in virtual teams. *Asia Pacific Management Review*, 28(2), 120-131.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- Bannor, P., Nani, G., Osei-Tutu, S., Asamoah, R. O., Kyong-Ire, S., & Mensah, J. A.-P. (2026). Barriers to Stakeholder Management in Public Projects: A Case of Pre-Tertiary Educational Infrastructure Projects. *African Journal of Applied Research & Sustainable Development*, 4(1), 135-147.
- Bass, B. (2015). Transformational leadership theory. In *Organizational Behavior 1* (pp. 361-385). Routledge.
- Bindel Sibassaha, J. L., Pea-Assounga, J. B. B., & Bambi, P. D. R. (2025). Influence of digital transformation on employee innovative behavior: roles of challenging appraisal, organizational culture support, and transformational leadership style. *Frontiers in psychology*, 16, 1532977.
- Braun, F., & Avital, M. (2007). Good project management practices drive more than project success: learning, knowledge sharing and job satisfaction in IT project teams. *AMCIS 2007 proceedings*, 297.
- Bukhari, S. K. U. S., Qamar, A. H., & Abiodullah, M. (2025). Evaluation of Leadership Development Program for Secondary School Heads: Perceived Satisfaction, Learning and its Implementation. *Journal Homepage*, 6(1), 44-59.
- Castro, M., Barcaui, A., Bahli, B., & Figueiredo, R. (2022). Do the project manager's soft skills matter? Impacts of the project manager's emotional intelligence, trustworthiness, and job satisfaction on project success. *Administrative sciences*, 12(4), 141.
- Casula, M., Rangarajan, N., & Shields, P. (2021). The potential of working hypotheses for deductive exploratory research: M. Casula et al. *Quality & quantity*, 55(5), 1703-1725.
- Chen, X., & Xie, Q. (2025). The relationship between job stress, resilience, emotional intelligence, and job satisfaction among college teachers. *Scientific Reports*, 15(1), 20390.
- Chuang, L.-M., & Huang, S.-H. (2025). AI-supported healthcare technology resistance and behavioral intention: A serial mediation empirical study on the JD-R model and employee engagement. *Systems*, 13(4), 268.
- Crews, E.-R., Brouwers, M., & Visagie, J. C. (2019). Transformational and transactional leadership effects on communication styles. *Journal of Psychology in Africa*, 29(5), 421-428.

- Cserhati, G., & Schimmer, D. (2025). Matching Leadership Style to Project Context: Exploring Contextual Factors Affecting Project Managers' Leadership Style. *The Eurasia Proceedings of Educational and Social Sciences*, 44, 50-69.
- Dartey-Baah, K., Quartey, S. H., & Wilberforce, M. T. (2024). Organizational ethics and workplace incivility: the mediating effects of transformational and transactional leadership styles. *Leadership & Organization Development Journal*, 45(5), 792-810.
- Dhaneesh, R., Iswarya, V., & Anand, S. (2025). An analysis of stress burnout and work engagement of paternalistic leadership using job demand-resource (JD-R) model. *Rajagiri Management Journal*, 19(1), 44-56.
- Ellahi, A., Rehman, M., Javed, Y., Sultan, F., & Rehman, H. M. (2022). Impact of servant leadership on project success through mediating role of team motivation and effectiveness: a case of software industry. *Sage Open*, 12(3), 21582440221122747.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Eyieyien, O. G., Idemudia, C., Paul, P. O., & Ijomah, T. I. (2024). Effective stakeholder and risk management strategies for large-scale international project success. *International Journal of Frontiers in Science and Technology Research*, 7(1), 013-024.
- Fareed, M. Z., Su, Q., Almutairi, M., Munir, K., & Fareed, M. M. S. (2022). Transformational leadership and project success: The mediating role of trust and job satisfaction. *Frontiers in Psychology*, 13, 954052.
- Göküz, B., & Akiner, İ. (2025). Investigating key factors influencing the success of construction projects at international level. *Discover Civil Engineering*, 2(1), 30.
- Gupta, P. (2025). Transformational leadership: inspiring change and innovation. *International Journal of Science and Research (IJSR)*, 14(2), 504-509.
- Gupta, S., Bhasin, J., & Mushtaq, S. (2021). Employer brand experience and organizational citizenship behavior: mediating role of employee engagement. *Asia-Pacific Journal of Business Administration*, 13(3), 357-382.
- Hamermesh, D. S. (1999). The changing distribution of job satisfaction. In: National bureau of economic research Cambridge, Mass., USA.
- Hartika, A., Fitridiani, M., & Asbari, M. (2023). The effect of job satisfaction and job loyalty on employee performance: A narrative literature review. *Journal of Information Systems and Management (JISMA)*, 2(3), 9-15.
- Holton, E. F., & Burnett, M. F. (2005). The basics of quantitative research. *Research in organizations: Foundations and methods of inquiry*, 29-44.
- Hossain, M. M., & Islam, M. S. (2025). Employee loyalty moderates the relationship between job satisfaction and other influencing factors of employees' performance. *Journal of the Knowledge Economy*, 16(3), 12481-12503.

- Hussain, U. Y. (2022). The mediating role of job satisfaction and transformational leadership on emotional intelligence and project success. *Journal of Positive School Psychology* <http://journalppw.com>, 6(8), 3668-3682.
- Ibrahim, B. A., & Hussein, S. M. (2024). Relationship between resilience at work, work engagement and job satisfaction among engineers: a cross-sectional study. *BMC Public Health*, 24(1), 1077.
- Imron, D. A., & Choiruddin, A. (2025). Evaluating the Impact of Critical Success Factors of Incident Prevention Programs on Construction Project Success. *International Journal of Safety & Security Engineering*, 15(10).
- Iqbal, M. T., Warraich, I. A., & Haq, S. U. (2023). Impact of employee resilience and job engagement on project success: Mediating role of innovative work behavior. *Research Journal for Societal Issues*, 5(3), 234-257.
- Iqbal, S. M. J., Zaman, U., Siddiqui, S. H., & Imran, M. K. (2019). Influence of transformational leadership factors on project success. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 13(1), 231-256.
- Ismail, A., Mohamad, M. H., Mohamed, H. A.-B., Rafiuddin, N. M., & Zhen, K. W. P. (2010). Transformational and Transactional Leadership Styles as a Predictor of Individual Outcomes. *Theoretical & Applied Economics*, 17(6).
- Kauppila, O. P. (2025). Revisiting the relationships between leadership and job satisfaction. *European Management Review*, 22(1), 256-270.
- Klein, G. (2023). Transformational and transactional leadership, organizational support and environmental competition intensity as antecedents of intrapreneurial behaviors. *European Research on Management and Business Economics*, 29(2), 100215.
- Korejan, M. M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of fundamental and applied sciences*, 8(3), 452-461.
- Kwon, K., Jeong, S., Park, J., & Yoon, S. W. (2024). Employee development and employee engagement: a review and integrated model. *Career development international*, 29(2), 169-184.
- Lai, A. (2011). Transformational-transactional leadership theory. *AHS Capstone Projects Paper*, 17, 1-33.
- Lei, D., & Slocum Jr, J. W. (2005). Strategic and organizational requirements for competitive advantage. *Academy of management perspectives*, 19(1), 31-45.
- Loderer, M., & Kock, A. (2025). How organisational and team climates foster design thinking for project success. *International Journal of Project Management*, 43(3), 102711.
- Majeed, H., Kayani, U. N., & Haider, S. A. (2026). The project communication and trust nexus as an antecedents of project success: Moderating role of authentic leadership. *International Journal of Business Communication*, 63(1), 59-80.
- Malesu, M. L., & Syrovátka, P. (2025). Critical success factors for small and medium sized businesses: a PRISMA-based systematic review. *Future Business Journal*, 11(1), 32.

- Maretha, C. (2023). Positivism in philosophical studies. *Journal of Innovation in Teaching and Instructional Media*, 3(3), 124-138.
- McKevitt, D., Carbery, R., & Collins, S. (2022). Job crafting in project management: Implications for project success and career satisfaction. *International journal of project management*, 40(7), 741-749.
- Mekonnen, M., & Bayissa, Z. (2023). The effect of transformational and transactional leadership styles on organizational readiness for change among health professionals. *SAGE open nursing*, 9, 23779608231185923.
- Mishra, P. K. (2013). Job satisfaction. *IOSR journal of humanities and social science*, 14(5), 45-54.
- Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of economic development, environment and people*, 9(4), 50-79.
- Mohammad, A. M., Menhat, M., Shafi, S., Hussein, A.-H. M. A., Al-Mubaideen, M. A., & Alshaketheep, K. (2025). Trends in employee performance: A comprehensive review and bibliometric analysis using Scopus and WOS. *SA Journal of Human Resource Management*, 23, 2887.
- Montenegro Méndez, S., Laguía González, A., & Moriano León, J. A. (2025). Is Leadership a Resource? A Systematic Review of Its Role in Burnout and Engagement Among Nurses Within the JD-R Model. *Journal of nursing management*, 2025(1), 8853148.
- Motalebi, M., Heffernan, E., McCarthy, T., Marzban, S., & Rashidi, A. (2025). Sustainability and stakeholder engagement in building information modelling-enabled construction: a review of critical success factors in design and planning phases. *Sustainability*, 17(3), 1086.
- Nauman, S., Musawir, A. U., Munir, H., & Rasheed, I. (2022). Enhancing the impact of transformational leadership and team-building on project success: The moderating role of empowerment climate. *International Journal of Managing Projects in Business*, 15(2), 423-447.
- Nechouani, I., & Machrafi, M. (2025). Leadership Styles and Project Success: A Narrative Review of Leadership in Project Management. *Economics and Management Review*, 3(1).
- Netemeyer, R. G., Maxham III, J. G., & Lichtenstein, D. R. (2010). Store manager performance and satisfaction: Effects on store employee performance and satisfaction, store customer satisfaction, and store customer spending growth. *Journal of Applied Psychology*, 95(3), 530.
- OFENIMU, O. P. Y. (2025). Comparative Analysis of Transformational and Transactional Leadership in Organizational Growth: Implications for Business Organizations in Nigeria. *Kontagora International Journal of Educational Research*, 2(2), 260-276.
- Okei, F. (2025). The Study of the Inevitability of Adopting Effective Project Management Strategies in Cutting Project Costs and Time Overruns.
- Olasunkanmi, F.-f. O., Ikediashi, D. I., & Ajiero, I. R. (2024). Assessing the factors of transactional leadership style for construction projects: a case of Nigerian construction industry. *Journal of engineering, design and technology*, 22(5), 1637-1654.

- Park, Y. S., Konge, L., & Artino Jr, A. R. (2020). The positivism paradigm of research. *Academic medicine*, 95(5), 690-694.
- Pearse, N. (2019). An illustration of deductive analysis in qualitative research. 18th European conference on research methodology for business and management studies,
- Pincus, J. D. (2023). Employee engagement as human motivation: Implications for theory, methods, and practice. *Integrative Psychological and Behavioral Science*, 57(4), 1223-1255.
- Prabhakar, G. P. (2005). Switch leadership in projects an empirical study reflecting the importance of transformational leadership on project success across twenty-eight nations. *Project management journal*, 36(4), 53-60.
- Prebanić, K. R., & Vukomanović, M. (2023). Exploring stakeholder engagement process as the success factor for infrastructure projects. *Buildings*, 13(7), 1785.
- Purwanto, A., Bernarto, I., Asbari, M., Wijayanti, L. M., & Hyun, C. C. (2020). Effect of transformational and transactional leadership style on public health centre performance. *Journal of Research in Business, Economics, and Education*, 2(1).
- Quick, A. D. (2026). BRIDGING LEADERSHIP THEORY AND PRACTICE IN UNIVERSITY ADVANCEMENT: EXPLORING TRANSACTIONAL, TRANSFORMATIONAL, AND FOLLOWERSHIP DYNAMICS.
- Ramirez-Lozano, J., Peñaflor-Guerra, R., & Sanagustín-Fons, V. (2023). Leadership, communication, and job satisfaction for employee engagement and sustainability of family businesses in Latin America. *Administrative sciences*, 13(6), 137.
- Raziq, M. M., Borini, F. M., Malik, O. F., Ahmad, M., & Shabaz, M. (2018). Leadership styles, goal clarity, and project success: Evidence from project-based organizations in Pakistan. *Leadership & Organization Development Journal*, 39(2), 309-323.
- Rehan, A., Thorpe, D., & Heravi, A. (2025). An empirical study on project managers' leadership behavioral practices impacting project success—the Australian construction sector. *International Journal of Construction Education and Research*, 21(2), 164-188.
- Rezvani, A., Chang, A., Wiewiora, A., Ashkanasy, N. M., Jordan, P. J., & Zolin, R. (2016). Manager emotional intelligence and project success: The mediating role of job satisfaction and trust. *International journal of project management*, 34(7), 1112-1122.
- Roopa, S., & Rani, M. S. (2012). Questionnaire designing for a survey. *Journal of Indian Orthodontic Society*, 46(4\_suppl1), 273-277.
- Sajid, M., Awais, M., & Abrar, R. (2024). Examining the mediating effect of organizational commitment and job satisfaction between project manager emotional intelligence and project success. *Int. J. Manage. Res. Emerging Sci*, 14(1), 129-146.
- Salameh-Ayanian, M., Lakkis, P., Jabbour Al Maalouf, N., & Makki, M. (2025). Leading through uncertainty: How transformational and transactional leadership shape employee satisfaction and performance in Lebanese NGOs. *Administrative Sciences*, 15(5), 172.

- Shahid, M. S., Komal, S., Khalid, A., Shami, A. Z. A., & Qureshi, S. (2025). Project Managers' Emotional Intelligence and Team Performance: The Mediating Role of Team Cohesion. *Pakistan Journal of Humanities and Social Sciences*, 13(4), 174-182.
- Sheena, D., Benoliel, P., & Berkovich, I. (2025). A qualitative exploration of principals' transformational leadership and transactional leadership behaviors during the COVID-19 crisis: the rise of integrated crisis leadership. *Frontiers in Education*,
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American journal of Applied Mathematics and statistics*, 9(1), 4-11.
- Soiferman, L. K. (2010). Compare and Contrast Inductive and Deductive Research Approaches. *Online Submission*.
- Sürücü, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & management studies: an international journal*, 8(3), 2694-2726.
- TAKEED, Z., ALI, M. D., LATIF, A., & LAUNER, M. A. (2024). The Impact of Transformational and Transactional Leadership Styles on Project Success in Afghanistan: An Empirical Study of the Leadership Dynamics in Nangarhar NGOs.
- Verma, J., Sinha, A., Bhattacharjee, S. B., & Tuan Luu, T. (2025). Emotional intelligence as an antecedent of employees' job outcomes through knowledge sharing in IT-ITeS firms. *International Journal of Productivity and Performance Management*, 74(4), 1241-1266.
- Warsi, A. Z., & Shaiq, M. (2025). The role of sustainable planning and project team attitude in achieving sustainable project success in the health sector. *THE ASIAN BULLETIN OF GREEN MANAGEMENT AND CIRCULAR ECONOMY*, 5(1), 44-64.
- Waseem, M., Iqbal, S., & Khan, K. (2025). Effect of humble leadership on project success: the mediating role of team engagement and the moderating role of organizational culture. *Journal of Facilities Management*, 23(1), 98-121.
- Woime, A. W., & Shato, G. A. (2025). The role of emotional intelligence and conflict management in job satisfaction and teamwork: A systematic review. *Public Health Challenges*, 4(2), e70054.
- Zeqiri, J., Ramadani, V., & Aloulou, W. J. (2023). The effect of perceived convenience and perceived value on intention to repurchase in online shopping: the mediating effect of e-WOM and trust. *Economic research-Ekonomska istraživanja*, 36(3).
- Zhao, N., Fan, D., & Chen, Y. (2021). Understanding the impact of transformational leadership on project success: A meta-analysis perspective. *Computational Intelligence and Neuroscience*, 2021(1), 7517791.
- Zhu, Y. (2012). A review of job satisfaction. *Asian social science*, 9(1).
- Zolfaghary, F., Pasha, H., Bakouei, F., MashaghiTabari, R., & Adib-Rad, H. (2025). Emotional intelligence approach as a predictor of job satisfaction among midwives in Northern iran: A descriptive-correlational study. *Journal of Education and Health Promotion*, 14(1), 186.

## **Questionnaire**

### **Title: Impact of Leadership Style and Job Satisfaction on Project Success: The Mediating Role of Employee Engagement**

#### **Dear Participant,**

You are welcome to participate in this research study on academia, aimed at exploring the influence of the leadership styles and job satisfaction in the project success, as well as the mediating effect of employee engagement in that process. The involvement in this project will assist the researchers in understanding workplace behaviour better and enhance the practice in organizations within the project environment. Your involvement in this research is entirely voluntary and you can always drop out of the research without any consequences. The information you present will be held in the highest level of confidentiality and anonymity. No personal information like name, organization or contact details will be gathered. The information will be utilized in academic purposes, and it will be presented in aggregates. Honest answers to questions are highly appreciated because there are no correct or incorrect answers.

#### **Section A: Demographic Information**

##### **1. Age**

- 20 – 30
- 31 – 40
- 41 – 50
- 51 and above

##### **2. Gender**

- Male
- Female
- Prefer not to say

##### **3. Work Experience**

- Less than 1 year
- 1 – 5 years
- 6 – 10 years

- More than 10 years

#### 4. Job Level

- Entry Level
- Middle Management
- Senior Management

#### 5. Department

- HR
- Finance
- Marketing
- Operations
- Other: \_\_\_\_\_

### Section B: Study Variables

#### Instructions:

Please indicate your level of agreement with each statement using the following scale:

1 = Strongly Disagree      2 = Disagree      3 = Neutral      4 = Agree      5 = Strongly Agree

#### Employee Engagement

| Item | Statement                                  | 1                        | 2                        | 3                        | 4                        | 5                        |
|------|--------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| EE1  | I concentrate on my job when I am at work. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE2  | I give my job a lot of attention.          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE3  | At work, I am absorbed by my job.          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE4  | I am enthusiastic in my work.              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE5  | I am interested in my job.                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE6  | I am proud of my job.                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE7  | I am excited about my job.                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE8  | I exert my full effort to my job.          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|      |                                               |                          |                          |                          |                          |                          |
|------|-----------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| EE9  | I devote a lot of energy to my job.           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE10 | I strive as hard as I can to complete my job. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| EE11 | I exert a lot of energy on my job.            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### Job Satisfaction

| Item | Statement                                                                                              | 1                        | 2                        | 3                        | 4                        | 5                        |
|------|--------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| JS1  | All in all, I am satisfied with my present job.                                                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| JS2  | Considering pay, promotion, supervisors, co-workers, and benefits, I am satisfied with my present job. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| JS3  | Generally speaking, I am very satisfied with my present job.                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### Transformational Leadership

| Item | Statement                                               | 1                        | 2                        | 3                        | 4                        | 5                        |
|------|---------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| TFL1 | My leader talks about important values and beliefs.     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL2 | My leader celebrates achievements.                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL3 | My leader talks enthusiastically about goals.           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL4 | My leader creates a sense of priorities and purpose.    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL5 | My leader stimulates me to rethink the way I do things. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL6 | My leader asks questions that make me think.            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL7 | My leader teaches and coaches me.                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL8 | My leader helps me develop my strengths.                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TFL9 | My leader is an active listener.                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### Transactional Leadership

| Item | Statement                                               | 1                        | 2                        | 3                        | 4                        | 5                        |
|------|---------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| TAL1 | My leader makes clear expectations.                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TAL2 | My leader takes action before problems become serious.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TAL3 | My leader tells us the standards for carrying out work. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|      |                                                                |                          |                          |                          |                          |                          |
|------|----------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| TAL4 | My leader works out agreements with me.                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| TAL5 | My leader monitors my performance and keeps track of mistakes. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

### **Project Success**

| <b>Item</b> | <b>Statement</b>                                                   | <b>1</b>                 | <b>2</b>                 | <b>3</b>                 | <b>4</b>                 | <b>5</b>                 |
|-------------|--------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| PS1         | Our project was completed on time.                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS2         | Our project was completed within budget.                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS3         | Our project met scope as specified.                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS4         | Our project met quality as specified.                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS5         | Our project met expectations.                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS6         | Safety and environmental conditions of the project were satisfied. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PS7         | Overall, the project was a success.                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Thank you for your valuable participation.**