

EFFECTIVE PROJECT LEADERSHIP STYLES FOR HYBRID TEAMS IN THE
AUSTRALIAN BANKING INDUSTRY

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Brinda Shrestha, MBS, BBS

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AUSTRALIAN BANKING INDUSTRY

by

Brinda Shrestha

Supervised by

Jacqueline Suaverdez

APPROVED BY

Dr..Olesya Meskina



Dissertation chair

RECEIVED/APPROVED BY:

Admissions Director

Dedication

This thesis is dedicated to my parents, my husband, and my son, and in memory of my late grandfather, who always encouraged me to pursue my dreams, believed in me, and inspired me to believe I could achieve anything I wholeheartedly pursued.

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ABSTRACT

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Brinda Shrestha
2024

Dissertation Chair: <Chair's Name>
Co-Chair: <If applicable. Co-Chair's Name>

The Australian banking industry has seen a significant shift towards hybrid work models. This has necessitated effective project leadership to navigate the challenges of managing both remote and face-to-face teams. Although there is a growing focus on project leadership in a hybrid environment, literature on this domain is scarce. There is a limited understanding of the relationship between a Project Manager's leadership style, Leader-Member Exchange (LMX), and project performance in a hybrid environment. A multi-dimensional Project Leadership Framework, consisting of Ethical, Authentic, Transactional, and Transformational leadership styles, was conceptualized based on the extensive literature review. The Project Leadership Research Model was then developed to validate the multi-dimensionality and effectiveness of a Project Manager's leadership styles. The study focused on the hybrid project teams in the Australian banking industry and identified the Project Manager's key leadership styles that can lead to project success. It also examined whether LMX mediates the relationship between Project Manager's leadership styles and project success. A positivist philosophy with a deduction

approach was used to collect data through an online Google Forms survey for quantitative analysis using SPSS Version 29.0. Descriptive and inferential statistics like means, correlation, factor analysis, ANOVA, and regression analyses were used to statistically analyze the data gathered from a valid sample of 82 respondents.

The study validated the overlap of leadership styles and the multi-dimensionality of project leadership. It highlighted the critical role of effective leadership styles, particularly Ethical, Authentic, and Transformational, in enhancing project performance within the Australian banking industry. While positively impacting project performance, Transactional Leadership exhibited a weaker influence than other styles. Furthermore, the study revealed that LMX partially mediated the relationship between leadership styles and project performance, underscoring the importance of strong, trust-based relationships between Project Managers and project team members. These findings contribute to the existing body of knowledge on leadership theories and offer practical recommendations for leadership development and improving leadership effectiveness to navigate the complexities of hybrid project teams in the banking industry.

Key Words: Hybrid project teams; project management; project manager, authentic leadership; ethical leadership; transactional leadership; transformational leadership; leader-member exchange; project success; project performance; multi-dimensional leadership approach; hybrid work model.

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LIST OF ABBREVIATIONS

AL – Authentic Leadership Style

ALQ – Authentic Leadership Questionnaire

ANOVA – Analysis of Variance

COVID-19 – Coronavirus Disease 2019

EFA - Exploratory Factor Analysis

EL – Ethical Leadership Style

KMO - Kaiser-Meyer-Olkin Measure of Sampling Adequacy

LMX – Leader-Member Exchange

LS – Combined Leadership Style

MLQ – Multifactor Leadership Questionnaire

PM – Project Manager

PP – Project Performance

RQ – Research Question

SPSS – IBM SPSS Statistics previously known as Statistical Package for the Social Sciences

SSBM – Swiss School of Business and Management

TSL – Transactional Leadership Style

TFL – Transformational Leadership Style

CHAPTER I: INTRODUCTION

1.1 Introduction

As with most industries, the banking industry also relies on Project Managers (PM) to guide and manage the projects, ensuring the strategic business objectives are met. The banking industry deals with borrowing and lending money. Banks are central to financial stability in the economy and the modern economy cannot do without banks; hence, strong, effective, and holistic prudential supervision is essential (Ellis, 2016), leading to rigorous regulatory and compliance requirements. Apart from the stringent regulations, there are more challenges that the banking industry faces continuously such as increasing competition, changing business models, rising costs, customer retention, obsolete systems and processes, technological advancement, cultural shifts, rising expectations from customers, data privacy, security breaches, etc. Addressing these challenges efficiently and effectively will ensure the bank's survival and sustainability in the competitive world. This is where the banking industry relies on PMs, who are professionals to lead and manage such projects, be it streamlining and reengineering the internal processes to providing new levels of security in the banking system, consolidating legacy systems to digital transformation, new product development to enhancing banker and customer experience and so on. Banks can reap significant benefits from well-planned and well-executed projects. Leaving these projects with the PMs will free up bankers' time so they can focus on core banking activities.

Project management relates to the practice of managing end-to-end activities of the project to deliver a desired project outcome. PMs manage projects by applying their knowledge, skills, tools, and techniques. Project management also entails leading team

members working on the project and supporting the project to deliver a collective goal. Project management activities cover activities from employing effective processes, planning, coordination, measuring, monitoring work, etc., while project leadership focuses on the people aspect of the project like influencing, motivating, enabling, and directing the project team. Both aspects are important in delivering the project outcome. As PMs are formally tasked with these activities, they are deemed responsible for project success (Montenegro *et al.*, 2020) by ensuring that the project is on track to deliver the agreed value and outcome. Technological advancement and artificial intelligence have resulted in most of the technical aspects of a PM's work like reporting, scheduling, budgeting, etc., being completed by project management software; while, the people aspect of the job like leadership, communication, and stakeholder engagement remains with the PMs.

With the advancement in technology, focus on work-life balance, employees' preference and flexibility options provided by the employers, and opportunities to seek and retain global talent, to name a few, a hybrid project workforce is more common these days. In the virtual and hybrid world, it can be challenging to create the same level of collaboration, connectivity, and engagement that is possible in a traditional face-to-face working environment. Successful PMs and project teams have been using various innovative ways and technology tools to combat challenges brought in by the hybrid work model. PMs, like any leaders, use various leadership styles to lead their teams toward achieving the ultimate goal of delivering successful projects. However, there are numerous leadership styles and theories, and finding the effective one that leads to a successful outcome can be a challenge as the physical distance between the PMs and the team members grows in this ever-changing hybrid work environment (Stich, 2022; Axtell *et al.*, 2005).

1.1.1 Motivation of the Study

Understanding and implementing the effective project leadership style for a given situation in a hybrid work model shall lead to an increased level of team engagement and successful project outcomes. With the stringent regulations and governance in the banking industry, banks must investigate the effectiveness of project leadership for numerous projects that they run in now hybrid environment to ensure the success of those projects, while still being compliant with the policies and regulatory requirements. Senior banking leaders can't just rely on the PM with the right technical skills. The banking industry needs PMs with the right people skills and leadership style to lead the projects towards favorable project outcomes.

Academics are now becoming progressively attentive to factors that impact project leadership effectiveness in the hybrid context. Project management and leadership effectiveness refer to the success of the project (Hyväri, 2006). The scholarly focus on project leadership styles, hybrid environment, and the existing gaps in the literature, especially in the banking industry, motivated this study. This study examined the effective project leadership styles prevalent among the PMs working in the hybrid environment in the Australian banking industry, that lead to successful projects.

1.1.2 Importance of the Study

This research will contribute to a scholarly study on hybrid project team leadership. This study will be of interest to researchers, and academicians in the hybrid teams, project leadership, and banking domains. Besides the academic value, this study will be important and relevant to the project management practice, and the banking industry as this research shall serve as a guide on effective project leadership of hybrid teams by identifying the leadership styles that are relevant to the Australian banking industry.

The PM's leadership style effectiveness has been measured and evaluated through the data gathered from project stakeholders and hybrid project team members including the PMs. This study provided valuable insights and understanding of the PM's influences on others and their perceived leadership behaviors. This study also demonstrated the benefits of a particular leadership style (Authentic, Ethical, Transformational, and Transactional), and provided a generic Project Leadership Model for hybrid teams to analyze the relationship between leadership style, quality of the exchange relationship (Leader-Member Exchange or LMX), and project performance (PP). This can support PMs and project practitioners in developing specific leadership behaviors. The study validated the PM's current practices for successful PMs while offering positive insights into how leadership behaviors can enhance project performance for others.

This research is timely due to the growing flexibility now available in the work environment with varying degrees of virtuality leading to more hybrid project teams, where the application of leadership styles can look dissimilar to the ones that were effective in traditional face-to-face work models. This study will hold significant importance for research, especially given the increasing diversity of operating models and the distribution of project tasks. Long-term growth in a hybrid work model seems inevitable.

1.2 Research Problem

PMs lead and manage teams using various leadership styles. Each leadership style is suitable for different situations and contexts of projects based on its strengths. The leadership styles can have varying impacts on the project outcomes. It is believed that the PM's leadership style plays a vital role in influencing project performance and success (Arnold, 2008; Nauman and Khan, 2006). However, there is a lack of literature and

empirical studies to justify this claim (Pollack and Matous, 2019; Turner and Müller, 2005).

The quality of the exchange relationship (LMX) between the PM and team members can make or break the project, leading to success or failure. Maintaining a high-quality relationship between them can be way more challenging in the hybrid environment as the physical distance between the two parties increases (Stich, 2022; Axtell *et al.*, 2005). Yet, there is a gap in the literature interrogating the influence of LMX between the PM and project team on the success of projects.

“The future of work is here and it's hybrid” (Microsoft Work Trend Index, 2021 as cited by Stich, 2022). A co-located project team is a thing of the past now. Due to the significant disruptions triggered by COVID-19, remote work became the prevailing trend, gaining academic attention. As the pandemic subsided, people are gradually returning to the office, ushering in a new era characterized by hybrid work arrangements. The mix of traditional settings combined with higher virtuality in teams presents new challenges for the leaders, who face enormous challenges in adapting their leadership styles (Zayani, 2008). While the origin of hybrid work dates back to the '90s with the rise of the term “teleworking” (Nilles, 1994), research until today is scarce for the project leadership of hybrid teams.

With the transition of the work to more of a hybrid model, the leadership styles and competencies used by PMs have also changed. However, there is a gap in the literature studying this shift. The literature on leadership suggests that different leadership styles are appropriate in different situations and contexts. The project management literature also suggested that different leadership styles are appropriate for different project types and project phases. However, the literature has overlooked the contribution of the PM's leadership style to project success. Research has been conducted on the

project leadership style and its impact on project performance (Jiang, 2014; Yang *et al.*, 2013; Müller and Turner, 2007a); but most are limited to the public sector, manufacturing, construction industries, or not-for-profit organizations and generalized to a traditional work model (Yang *et al.*, 2013; Müller and Turner, 2007a). Limited studies have been carried out in the project space in banking.

The plethora of literature on leadership styles, projects, and hybrid work was reviewed as part of this study. It was found that very few studies have been previously conducted on project leadership styles in hybrid teams, especially focusing on the banking industry and in Australia. The banking industry is important as it is one of the major contributors to the Australian economy. Despite the global financial crisis and the COVID-19 pandemic, the banking industry has produced stable and encouraging results. Yet, it lacks academic focus. The literature review also highlighted that most of the published research was undertaken in the United States of America, and therefore it is US models that have dominated the leadership literature (Alimo-Metcalfe, 2013), hence suggesting a research gap in the project leadership domain in another geographic region.

Several research gaps could be detected across the project leadership literature, especially in hybrid environments. Highly cited papers in research on virtual teams have distinguished between traditional, hybrid, and fully virtual teams (e.g. Fiol and O'Connor, 2005; Griffith and Neale, 2001), however, most of the studies focused on differences between face-to-face and fully virtual work (e.g. Golden and Eddleston, 2020; Kirkman and Mathieu, 2005; Griffith and Meader, 2004). Some literature even excluded hybrid teams by highlighting it as a potential future research opportunity (e.g. Tangirala and Alge, 2006; Alge *et al.*, 2003). Surprisingly, little is still known about the effective leadership of hybrid project teams, despite the increased interest it has amassed. Hybrid

work literature is hard to discover since the degree of virtuality is rarely given attention in the existing studies on virtual teams (Stich, 2022; Kiesler and Cummings, 2002).

Müller *et al.* (2016) stated that research on project leadership is becoming increasingly important for project management as a profession. Traditional and long-established leadership styles and approaches might not work in temporary project settings (Thamhain, 2004). Hence, project leadership requires approaches that differ from those used in permanent organizations (Chen *et al.*, 2004; Packendorff, 1995). Furthermore, as many organizations are caught between traditional structures and new digital structures created by information technologies indicating a transition towards a hybrid environment, traditional assumptions about leadership and organizations may need to evolve (Lynn Pulley and Sessa, 2001).

The above problem statement and research gap indicated a need to conduct a study focusing on the PM's leadership styles to lead hybrid project teams in the banking industry in Australia. This research will, therefore, help to improve the understanding of effective project leadership styles leading to successful project outcomes.

1.3 Purpose of Research

The purpose of this research was to examine the effective leadership styles of the PMs, working in the hybrid work model, leading the projects toward successful outcomes. This study had three objectives aligned with the research purpose. The first objective was to examine the effective leadership styles prevalent among the PMs working in the hybrid environment in the project space in the Australian banking industry. The second objective was to validate the Project Leadership Research Model (Figure 3.1) to examine the relationships between the PM's leadership style, the LMX between the PM and the hybrid project team members, and project performance, to address the lack of empirical data to support the theory that leadership styles influence

project performance. The third objective was to determine whether LMX has a mediating role in the relationship between the PM's leadership styles and project performance (success or failure). The objectives aligned with the findings of a literature review which indicated that most models explaining the relationship between project leadership and project success are based on theory rather than on empirical evidence (Belout and Gauvreau, 2004).

The objective was met by identifying the effective project leadership styles amongst Authentic leadership (AL), Ethical leadership (EL), Transactional leadership (TSL), and Transformational leadership (TFL) leading to favorable outcomes of project success and high-quality relationships between the PMs and hybrid project team members. The research then interrogated the influence of the quality of the exchange relationship between the PM and hybrid project team members (LMX) on the project performance as the interdependent relationship between these three components, as specified in the Project Leadership Research Model (Figure 3.1) cannot be ignored.

Depending on the project roles, expertise, project delivery methodology, and organizational structure, the leadership activities can be practiced by all project team members to some extent. However, this research focussed on the traditional vertical leadership - leadership styles of a PM as a formally appointed project leader. Thus, the focus of this study was on the leadership styles of middle-level management in the banking industry in Australia.

1.4 Significance of the Study

Due to the limited number of studies conducted on project leadership of hybrid teams in the banking industry, this research will theoretically and empirically contribute to the project management literature and the body of knowledge on project leadership in the following ways:

- It attempted to fill in the gap in the literature on PM's leadership styles, LMX, and project performance.
- It identified the effective project leadership styles applicable to hybrid project teams in the banking industry in Australia.
- It extended leadership theories by applying them to middle-level management, the PMs.
- It examined the relationship and impact of the PM's leadership style on project performance and the quality of exchange relationship (LMX) between the PMs and hybrid project team members, contributing to the leadership theory.
- It interrogated the relationship and impact of the LMX on the relationship between the PMs and hybrid project team members on project success, hence again contributing to the leadership theory.

The findings of this research will help the leaders in the banking industry, and their managers to become more educated and informed about the project leadership styles applicable to the hybrid project teams. The findings will also help them understand the impact of leadership behaviors on the quality of exchange relationships (LMX) and project success. This will, in turn, help them to identify, source, and secure the PMs with the relevant leadership styles. This will also help them support, train, guide, and coach the PMs toward the relevant leadership traits, to lead the projects toward successfully achieving the outcome and ensuring alignment of project goals with strategic business goals.

The research findings are also relevant to the PMs and practitioners to find the gap in their leadership behavior, identify their leadership strengths, and define leadership styles to develop. The findings will be helpful to them in determining whether to adopt

certain leadership styles in their projects. They can use the research results to understand the associations among leadership styles, LMX, and project performance, and to modify their current leadership behaviors appropriately. This will emphasize the importance of applying relevant project leadership styles to effectively enhance the relationship quality between them and hybrid project team members, resulting in project success. This research will hence give them a guideline on the leadership behaviors to make their project a success. This will also provide them guidance on the use of various leadership styles based on the situation and other factors such as project team composition and project types, to name a couple.

The Body of Knowledge and Training, Capability & Professional Development teams in the banking industry can also benefit from this research as this attempts to uncover the current landscape of project leadership in a hybrid environment helping them design relevant programs on leadership development in projects.

1.5 Research Purpose and Questions

The purpose of this research was to examine the effective leadership styles of the PMs, working in the hybrid work model in Australian banks, leading the projects toward successful outcomes. This research aimed to answer the following research questions (RQ) to address the problem statement and meet the research objectives listed above:

RQ1. Which leadership styles among Authentic, Ethical, Transactional, and Transformational, are the effective leadership styles for a Project Manager to lead hybrid project teams in the banking industry in Australia?

RQ2. Why is project leadership of hybrid teams in the banking industry in Australia a combination of multiple key leadership styles?

RQ3. How does the Project Manager's leadership style impact project performance/success in a hybrid environment?

RQ4. How does the Project Manager's leadership style impact the quality of the relationship between the Project Manager and the project team members (LMX) in a hybrid environment?

RQ5. How does the quality of the relationship between the Project Manager and hybrid project team members (LMX) impact the project performance?

CHAPTER II: REVIEW OF LITERATURE

2.1 Project Leadership Framework for Hybrid Teams

A Project Leadership Framework for hybrid teams entails a structured approach to leading teams that consist of both in-person and remote members. Based on the literature review, the Project Leadership Framework typically encompasses several key elements and principles, including clear communication, inclusivity, adaptability, trust building, team building, conflict management, flexibility, technology utilization, and so on. The framework guides project leaders in effectively managing and leading hybrid teams, recognizing the unique challenges and opportunities that arise when combining in-person and remote team members.

Considering the above key components of the Project Leadership Framework for hybrid teams in the banking industry, it is anticipated that a PM likely encompasses a mix of four leadership styles namely Authentic leadership (AL), Ethical leadership (EL), Transactional leadership (TSL), and Transformational leadership (TFL). AL fosters trust, encourages open communication, and creates a positive and ethical work environment. EL emphasizes moral and principled behavior, integrity, and a commitment to doing what is right. TSL encourages followers to complete goals by clearly identifying roles and setting vision. TFL captures the project leader's ability to digitally influence and build trust by motivating and inspiring followers to work.

Avolio and Gardner (2005) found an overlap between Authentic and Transformational leadership approaches. Hoch *et al.* (2018) also found correlations between Authentic, Transformational, and Transactional approaches with significant conceptual overlap. Other researchers have opined that effective leaders combine both Transformational and Transactional leadership styles (Snodgrass and Shachar, 2008;

Bass, 1998). The banking industry, being highly regulated, calls for leaders to be ethical. This is also supported by the Project Management Institute Code of Ethics and Professional Conduct (Project Management Institute, 2013), which requires PMs to work ethically and professionally and “comply with laws, regulations, and organizational and professional policies” (Project Management Institute, 2013).

The literature review also suggests a combination of key leadership styles, depending on needs and situations (Kumar and Provodnikova, 2021) leads to effective results. Furthermore, the PMBOK Guide (Project Management Institute, 2021) elaborates that project leadership styles are also tailored to meet the needs of the project, environment, and stakeholders, combining elements of various leadership styles. Effective leadership is shown when it best fits a given situation, hence supporting the Situational Leadership Theory. The view in the PMBOK Guide (Project Management Institute, 2021) aligns with the other literature which suggests leadership effectiveness to be a function of at least three sets of variables namely, leadership style, the situation, and the characteristics of the followers, thus linking effective project leadership to situational variables of a project in a complex manner.

The literature review found one of the most popular models of Bass (1985) Transformational Leadership Theory being criticized with the argument that there is no one best way of leadership as it depends on context (Yukl, 2010), indicating that a combination of relevant leadership styles is to be applied to be considered effective. This view is also echoed by Minder (2020) for the management of hybrid teams, emphasizing the need to combine elements of several leadership styles for the effective collaboration of hybrid teams. Lee (2014) as cited in Minder (2020) stresses the need to combine elements of Transformational and Transactional leadership for hybrid environments and is supported by Purvanova and Bono (2009), who have highlighted a positive correlation

between Transformational leadership and the performance of virtual teams. Hence, when developing a leadership approach for the current context where the degree of virtuality is rising, it is likely that digital age Authentic, Ethical, Transactional, and Transformational leadership approaches may each play a role to some extent and display some overlap (Zhu *et al.*, 2019). The work of other authors (Zhu *et al.*, 2019; Hoch *et al.*, 2018; Avolio and Gardner, 2005) supports the concept that these key leadership approaches and styles overlap; and suggests these four leadership approaches may be used holistically (Zhu *et al.*, 2019; Günzel-Jensen *et al.*, 2018) for effective project leadership.

The literature review, hence, suggests these four leadership styles to be used in combination. Hence, this study proposed a Project Leadership Framework for hybrid teams in the banking industry that may encompass aspects of all four leadership styles (AL, EL, TSL, and TFL). This overlapping approach of Project Leadership shown in Figure 2.1 considers that in today's hybrid age, Authentic and Ethical leadership, for example, can be pure, or can overlap with either Transactional leadership or Transformational leadership, while there is also a case where all four leadership styles co-exist and overlap (Zhu *et al.*, 2019; Günzel-Jensen *et al.*, 2018; Avolio and Gardner, 2005; Avolio *et al.*, 1999; Burns, 1978).

The research on these four leadership styles supports these as currently recognizable and relevant in the current hybrid age and therefore likely associated with project leadership styles for hybrid teams. Hence, this study proposed these four leadership styles as relevant and suitable leadership mix to better understand the current project leadership for hybrid teams in the banking industry.



Figure 2.1
Effective Project Leadership Styles for Hybrid Teams

Transactional and Transformational leadership are often considered on a continuum in leadership theory (Bass, 1985), assuming the leadership to be a linear range, with both leaderships representing two opposite points of a continuum (Burns, 1978). In some cases, a leader can show both Transformational and Transactional style, when a situation requires managerial activities like the onboarding resources to accomplish the vision (Birasnav, 2014). The supporters of Transformational leadership argue that in the current context, there is an expectation that subordinates perform beyond ordinary expectations, which is possible only through Transformational leadership (Bass, 1985). Avolio *et al.* (2000) are of the view that Transformational leadership is more likely to be suitable for virtual teams than Transactional leadership and, hence more relevant to hybrid teams, as it is associated with perceptions of higher ability for building trust among members.

Pure moral (Authentic or Ethical) leadership may arise in the current digital age when a leader does not involve Transactional or Transformational leadership. Further,

digital-age leadership approaches may overlap as these leadership styles can operate in a multi-dimensional space (Prince, 2018). Authentic and Ethical leadership go hand-in-hand, where Authentic leadership looks into moral values inwards within the self, while Ethical leadership promotes moral values by inspiring followers to do what is right. Voluminous studies demonstrate the positive impacts of Ethical and Authentic leadership styles on the outcomes of employees and teams as both leadership styles have strong connections with team leadership.

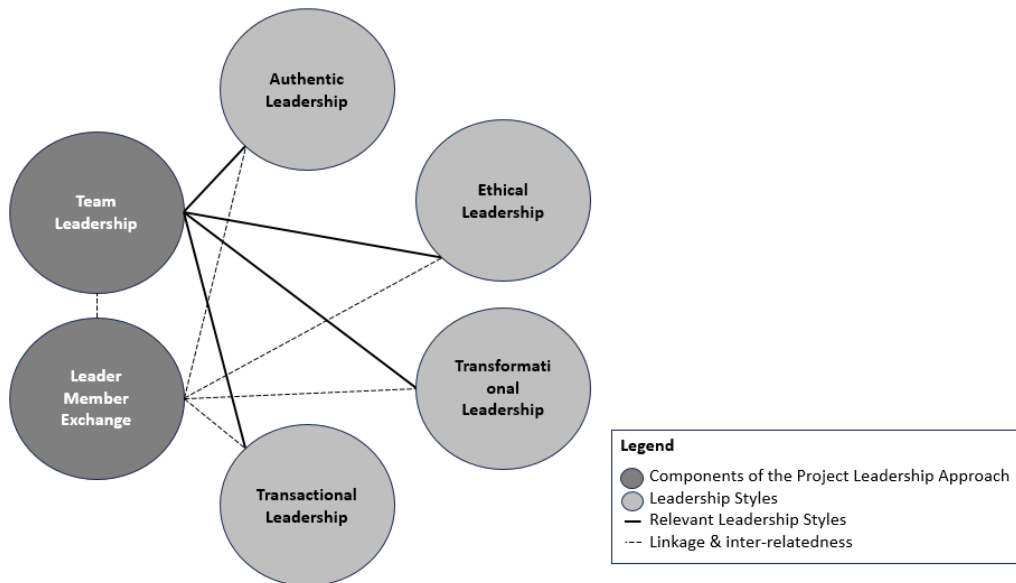


Figure 2.2
Project Leadership Framework for Hybrid Teams

The bibliometric analysis carried out by Zhu *et al.* (2019) also supports this theory that several leadership styles are linked with each other and also have close ties to team leadership (representing project leadership) at the same time. Figure 2.2 demonstrates the Project Leadership Framework for hybrid teams, indicating Team Leadership and Leader-Member Exchange (LMX) being the key components of project leadership, with Authentic, Ethical, Transformational, and Transactional leadership being the most

relevant leadership styles for managing hybrid teams in the banking industry, thus supporting the multi-dimensional leadership approach.

The literature review and justification above support the concept of project leadership for hybrid teams fitting across components of each of the four broad leadership styles shown in Figure 2.1 and Figure 2.2 (Authentic, Ethical, Transformational, and Transactional). This multi-dimensional leadership approach is likely deployable to meet new, pressing, and diverse strategic and skills transformation requirements brought about by the current hybrid world powered by digital technology. Hence, this study used a multi-dimensional leadership approach (a combination of Authentic, Ethical, Transactional, and Transformational) to investigate project leadership in hybrid teams.

2.2 Definition of Leadership

Leadership continues to be a topic of interest in the management literature, but there is no single agreed definition of this term. “There are almost as many different definitions of leadership as there are persons who have attempted to define the concept” (Bass, 1990). Some researchers have defined leadership as a process to influence people to achieve common goals or results (Kumar and Provodnikova, 2021; Northouse, 2010; Pardey, 2007). Wren (2013) has described leadership as a process comprising a series of interactions among leaders and followers that lead to the attainment of group goals. This is very similar to the definition of leadership given by Robbins (2006) as the ability to influence a group to achieve the desired goal set by a leader and by House *et al.* (1999) as “the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organization . . .”. Hence, leadership is regarded as the interpersonal influence exercised by leaders to achieve organizational goals.

Lægaard (2006) has provided a different perspective on leadership as the influence on other people, regardless of the reason, with leaders focusing on vision and objectives; and people focusing on fulfilling the expectations of stakeholders. Kumar and Provodnikova (2021) also provided a different angle to leadership as the ability to influence a group of people to believe, act, and work together to meet the greater good. While some authors have said that leadership is recognized in someone's behavior when experienced or seen (Pardey, 2007); others like Grint (2005) have focused on the leaders' abilities and qualities more; while some defined leadership as a purposeful relationship among participants using their skills to influence and advocate transforming change.

Leadership is considered the most studied and least understood concept in the social sciences (Bennis and Nanus, 2003) as researchers usually define leadership according to their perspectives and the aspects of the phenomenon of most interest to them (Shaw and Stogdill, 1974). In summary, leadership can be considered a continuous process in which leaders try to influence their followers to establish and attain a common goal, by exercising the power to influence others either by motivating them or by rewarding or punishing them (Vasilescu, 2019). Leadership is considered crucial in determining success (Lok and Crawford, 2004), and some have argued that it is the most critical ingredient (Lussier and Achua, 2010). Leaders stimulate, motivate, and recognize their followers to get high-performance results (Bushra *et al.*, 2011; Gill *et al.*, 2006).

2.3 Leadership Theories

Over the years, leadership research has witnessed rapid growth, with thousands of scientific articles documenting various leadership-based phenomena (Batistič *et al.*, 2017; Bass, 2008). A recent review by Meuser *et al.* (2016) identified 49 leadership theories in the published works of ten influential management and organizational psychology journals while Dinh *et al.* (2014) identified 66 different theoretical domains

on leadership and a wide variety of methodological approaches. There are as many theories about leadership as there are people who have studied and finally published their theories on leadership (Vasilescu, 2019).

Leadership literature reveals that theories have been refined and modified over time and none of the theories is completely irrelevant (Nawaz *et al.*, 2016); depending on the context in which it is applied. The type of leadership applied in areas involving a high degree of precision, confidence level, sensitivity, care, and technical expertise may be different than in simple management-oriented portfolios (Dess and Picken, 2000). This shows that situations, contexts, culture, working environment, new laws and regulations, organizational complexities, and psycho-socio developments considerably impact the leadership concept thereby, making it commensurate to the changing organizational dynamics (Amabile *et al.*, 2004).

The formal academic study of leadership began in the 1930s and is full of theories, models, and approaches, some of which build upon and extend earlier approaches, and others of which directly challenge them (Alimo-Metcalfe, 2013). Traditional leadership theories focus on the individualistic attributes of leaders and the qualities that distinguish leaders from followers (Cherry, 2014) while contemporary leadership theories look at other variables including situational factors, skill levels, and external environments (Cherry, 2014) or how influence and power are used to achieve the objectives of the organization (Germano, 2010), and are influenced by the notion that the most important part of leadership is not the leader, but the relationship between the leader and the followers. According to Waldman and Yammarino (1999) leadership theory has moved from birth traits and rights to acquired traits and styles to situational and relationship types of leadership to the function of groups and group processes and,

recently to the interaction of the group members with an emphasis on personal and organizational moral improvements and values.

In her impressive investigation into leadership theories and models, Alimo-Metcalfe (2013) has sought to critically review major models of leadership that have reflected the historical developments in leadership theory. According to Alimo-Metcalfe (2013), early models of leadership were concerned with increasing efficiency in production-focused contexts, and later models with the need to cope with ambiguity, greater competition, and change, while the major focus of leadership now is restoring trust in leaders and “doing leadership differently”, stressing the importance of a value-based approach and the integrity of those in leadership positions.

In the comprehensive analysis of leadership theories and research, Zhu *et al.* (2019) observed the particular trajectories and trends for landmark leadership research. During the 1990s, most of the landmark documents concerned Transformational and Charismatic leadership. In the 2000s, more landmark articles involved Social Exchange Theory and leadership in teams. However, from 2010 to 2017, leadership scholars' interest spread to value-based leadership (e.g., Servant leadership, Ethical leadership, and Authentic leadership), shared leadership, and the emergence of abusive supervision and followership research. This aligns with the findings and observations of Alimo-Metcalfe (2013) stated above. Leadership should, hence, be seen in the context of the time. The time of emergence aligns with the needs of the society and situation. Hence, the review of literature on leadership theories has been documented in the chronological order of the emergence of various theories.

2.3.1 The Great Man Theory

The Great Man Theory of leadership was developed by Thomas Carlyle (Nawaz *et al.*, 2016). The theory states that leaders are born and not made. Some people are born

with the necessary attributes that are responsible for their assuming positions of power and authority. As cited by Bass (1990), William James (1880) suggested that great men brought about changes in society. The history of the world, according to James, is the history of great men; they created what the masses could accomplish (Bass, 1990). The Great Man Theory ignored women leaders. This could be due to the leadership role being taken only by males in the earlier days. This theory was made redundant after a lot of research and studies, with the opinion that this concept of leadership was morally flawed.

2.3.2 Trait Theory

The Trait Theory was inspired by the Great Man Theory developed by Thomas Carlyle (Deshwal and Ashraf Ali, 2020). Later Sir Francis Galton concluded that leadership comprises a unique quality of extraordinary people that cannot be imitated (Deshwal and Ashraf Ali, 2020). Trait Theory focuses on personal characteristics; the identified inborn leadership traits of great social, political, and military leaders that were used to determine specific traits or characteristics, that differentiate leaders from non-leaders and followers (Nawaz *et al.*, 2016; Northouse, 2016; Armandi *et al.*, 2003; Bryman, 1993; Bass, 1982), the underlying premise is that leadership is inborn, as opposed to learned. Leadership theory, as such, progressed from the view that leaders are born to a reflection of certain traits that envisage leadership potential (Nawaz *et al.*, 2016).

Further research on the view that intellectual, physical, and personality traits distinguish non-leaders from leaders found that only minor variances exist between followers and leaders (Burningham and West, 1995). Some argue that there is no strong empirical evidence to indicate that personality characteristics make any leader more effective in improving employee performance (Yukl, 2010). Some researchers investigated traits such as “energy,” “dominance,” and “intelligence,” but findings were

inconsistent. This is probably not unusual as the situation was not taken into account. Reviews by Stogdill (1948) and Jenkins (1947) led to the conclusion that few traits were universally associated with leader effectiveness. Alimo-Metcalfe (2013) believed that these findings led to the general abandonment of such investigations.

The failure to detect the traits that every single effective leader had in common, resulted in a shift from the Trait Theory into new emerging theories (Alimo-Metcalfe, 2013). Stogdill (1948) believed that the qualities, characteristics, and skills that a leader needs are determined by the demands of the situation they face. Stogdill (1948) urged researchers to study the nature of the interaction between certain situational variables and traits.

More recently and as cited by Alimo-Metcalfe (2013), writers concerned with identifying the “dark side” of leadership (Furnham, 2016) have made a significant contribution towards the view that the same personality traits that make some leaders attractive, such as charisma, inspiration, vision, courage, and resilience, can also become a destructive force if they are exhibited in their extreme forms, and if there is a lack of concern and insight into the impact they have.

With the advancement in technology, undeniable acceptance of remote work, and the popularity of value-based leadership, the newer trait approach model suggests a different set of traits such as drive, motivation, honesty and integrity, self-confidence, cognitive ability, knowledge of business, and charisma (Moorhead and Griffin, 2008). These traits are valuable for today’s leaders implying the change to the Trait Theory to better fit the 21st century (Lee, 2021).

2.3.3 Behavioral and Style Theories

Behavioral Theory became dominant during the 1940s to the 1960s, advocating that effectiveness in leadership has to do with how the leader behaves (Hersey *et al.*,

2001), hence shifting the prominence to the behavior and style the leader adopted. The Behavioral Theory claims that the way that the leader is behaving is the key factor that distinguishes them from their followers (Berber *et al.*, 2019; Kovach, 2018). This theory focuses on the actions of the leaders, not their mental characteristics. This theory states that great leaders are made, not born, and that people can learn how to become leaders, mainly through learning and observation (Kovach, 2018). This theory assumes that an effective leader in any achievement context exhibits the behaviors that are most conducive to group productivity and group psychosocial growth (Kovach, 2018).

Most of the well-known studies for style/behavioral approach were conducted at Ohio State University and the University of Michigan in the 1950s and 1960s (Northouse, 2010; Nauman and Khan, 2006). Studies were conducted in laboratory settings, in which behaviors were observed mainly in students (House and Aditya, 1997), and in field settings, in which individuals were asked to rate people in authority. These data were then linked to various criteria of leader effectiveness (House and Aditya, 1997). The most important studies were of Bales (1954) at Harvard, Stogdill and Coons (1957) at Ohio State University, and researchers at the University of Michigan (Likert, 1961). Such behavior was described as the “leadership style” adopted by the leader.

This approach suggests multiple styles of leadership with the underlying assumption that there is one best way to lead; These studies suggested that the most effective leaders are those who engage in both task and relationship behaviors (Nauman and Khan, 2006). According to Nawaz *et al.* (2016), the Style Theory acknowledges the significance of certain necessary leadership skills that serve as enablers for a leader, while suggesting that each individual has a distinct style of leadership with which he/she feels most contented. However, one style cannot be effective in all situations. Yukl (1989) introduced three leadership styles - Democratic, Autocratic, and Laissez-faire

leadership. Yukl (1989) further assumed that all leaders could fit into one of these three categories. Fiedler and House (1995) identified two additional leadership styles focusing on the effectiveness of the leadership and they opined that consideration (concern for people and relationship behaviors – relationship-oriented leadership) and commencing structure (concern for production and task behaviors – task-oriented leadership) were vital variables. Hence, Behavioral Theory analyzes if a leader is oriented to tasks, people, or both. Recently, a third class of leadership behavior has been added to this list: change-oriented behavior, which is a behavior aimed at improving strategic decisions, adapting to changes in the environment, and thus guaranteeing future effectiveness (Yukl, 2010; Yukl, 1999a).

Behavioral Theory, thus offers a valuable means to scrutinize what leaders do and how they behave. This then helps to identify how leaders may be trained to be more effective. No consistent pattern was observed in studies investigating the impact of these leadership behaviors with various criterion variables, including subordinate satisfaction, or a range of subordinate or supervisory effectiveness measures, including productivity (Yukl, 2010; House, 1971). Reasons for the inconsistency in findings could include a multitude of factors, like a failure to take account of the variables in the situation, the effect of any interaction between subordinate behaviors on how the leadership style was demonstrated, and the nature of the criterion variable were selected (Northouse, 2010; Yukl, 2010). Other reasons might relate to the validity of the measure adopted (Bass, 1990; Schriesheim *et al.*, 1976). Leadership was studied mainly in the supervisory or junior management position (Alimo-Metcalfe, 2013).

A comprehensive study carried out by Alimo-Metcalfe (2013) concluded that despite the limitations, the Behavioral Theory was valuable as it broadened the focus of leadership research to include how leaders act with their followers/ subordinates, and

distinctions were drawn between task-related behavior and relationship-related behavior, and directive versus participative styles; while also providing a tool for informing training and development. It was not, however, able to show how leadership behaviors are linked to performance outcomes; nor, did it succeed in identifying a universal style that would be effective in most situations (Alimo-Metcalfe, 2013). The major weakness of Style and Behavioral Theory is that it ignores the role of situational factors, hence giving rise to the Situational and Contingency Theories of leadership (Fiedler, 1967), which shifted the emphasis away from the one-way to lead to context-sensitive leadership.

2.3.4 Theory X and Theory Y

McGregor (1960) believed that the fundamental convictions of managers play a pivotal role in shaping the way organizations are managed. Central to this is the manager's assumptions regarding human behavior, which fall into two broad categories - Theory X and Theory Y, categorizing two views of people at work and may be used to describe two opposing management and leadership styles (McGregor, 1960). As cited in the study of leadership theory by Landis *et al.* (2014), McGregor's Theory X and Theory Y attempt to describe how people relate to some organizations. Theory X states that people need to be directed and will not produce unless coerced or made to produce in an organization, while Theory Y assumes that followers will fulfill the needs of the organization because they are already motivated to do so (Landis *et al.*, 2014).

According to McGregor (1960), Theory Y assumes that work may be a source of satisfaction or punishment to some depending on the controllable conditions; and avoidance of responsibility, emphasis on security, and lack of ambition are the results of experience, not inherent human characteristics. Theory Y assumptions lead to more cooperative relationships between managers and workers. For McGregor (1960),

leadership is a complex relationship among these variables. McGregor (1960) was one of the first to argue that leadership was more about the relationship between the leader and the situation they faced, than merely the leader's characteristics alone.

McGregor's Theory Y aligns with Maslow's concept of self-actualization, however, organizations cannot operate solely driven by Theory Y as there is always a need for direction and structure for the smooth operation of any organization (Landis *et al.*, 2014). As cited in the study by Landis *et al.* (2014), Maslow advocated an improved version of Theory Y which involves an element of structured security and direction taken from Theory X.

2.3.5 Contingency and Situational Leadership Theories

By the late 1960s, there was a growing recognition of the significance of contextual factors in influencing the effectiveness of leadership behaviors, particularly the variables linked to tasks or projects in which leaders engaged with their subordinates (Alimo-Metcalfe, 2013; Bryman, 1993). These theories suggest that effective leadership is dependent on the leader's diagnosis and understanding of situational factors, followed by the adoption of the appropriate style to deal with each circumstance (Bryman, 1993). Hence, no one style of leadership can be followed in all given workplace situations (Kovach, 2018). Effective leaders adapt their leadership style based on the nature of the group, the situation, the objectives to be achieved, and the maturity of the subordinates (Bass and Avolio, 1997). The Contingency Theories of leadership assume that the effectiveness of leadership behaviors depends on the context and situational factors such as task and organizational conditions (Nauman and Khan, 2006; House, 1971), which also influence the relationship between the leadership style and organizational results (Cheng and Chan, 2000). Bass (1990) stated that the variance in impact of the situation could be due to the individual or the combined effect of the situation and the individual.

Situational theorists argued that great leaders emerged as a result of place, circumstance, and time (Bass, 1990).

The Contingency Theories recommend that no leadership style is precise as a stand-alone. There is no single right way to lead as the leadership style used is dependent on internal and external factors. The leaders and the employees change due to the dynamics and environment. The Contingency Theories are a category of Behavioral Theory that challenges that there is no one finest way of leading and organizing and that the style of leadership that is functioning in some circumstances may not be effective in others (Greenleaf, 1977). The key studies carried out on contingency theories are as below:

The Fiedler Model (Fiedler, 1967; Fiedler, 1964) emerged from his research in, mainly, military organizations, in which he observed the styles of leaders in a variety of situations (Northouse, 2010). It is based on the proposition that a manager's leadership style depends on their personality (Fiedler, 1972) and is thus to a large extent inflexible. This model initiated the switch from focusing purely on the personality traits of leaders to emphasizing the importance of contextual variables (Liden and Antonakis, 2009), particularly the relationship between leader and follower. It does not take account of the characteristics of subordinates, and their preference for the leadership style of their supervisor/manager (Wright, 1996), but rather it appears to focus on the manager's implicit notions of a preferred subordinate/followership. This theory does not even reflect the evidence that leadership can be developed, or that the responsibilities and roles of a manager typically change when they are promoted (Alimo-Metcalfe, 2013). While contingency models assume that managers can modify their leadership style, Fiedler's model does not accept this premise, as this model assumes that it is critical to match the

leader to the situation for leader effectiveness, rather than vice versa (Alimo-Metcalfe, 2013).

Situational Leadership Theory was developed by Paul Hersey and Ken Blanchard (Hersey and Blanchard, 1969) with the assumption that the effective leadership style does not remain static and changes as per the situation, and to be effective and successful, a leader should adopt his style and approach to different situations. Leaders adapt their behavior and leadership style according to their subordinates' commitment (Ghazzawi *et al.*, 2017). The situational model of leadership emphasized the importance of a range of variables, such as the levels of subordinate competence and confidence in the tasks they were performing, or their maturity or developmental level (Blanchard *et al.*, 1993; Hersey and Blanchard, 1969). According to Pretorius *et al.* (2018), a shift in leadership style is needed to adapt to the current global challenge and uncertainty, which aligns with the situational approach as it focuses on the principle that different situations demand different kinds of leadership. The core of the situational approach requires that leaders match their style (directive or supportive) to the competence and commitment of the followers (Pretorius *et al.*, 2018).

Path-Goal Theory was developed by Robert House (House, 1971) in 1971. This theory uses initiating structure, consideration, and expectancy theory of motivation as variables (House, 1971). This states that a leader should clarify the path of the followers and lead them effectively toward the goal by reducing roadblocks (House, 1971). When a task is stressful and ambiguous, directive leadership is preferable, while in a structured task, supportive leadership yields high-performance (House, 1971). Leaders can adapt their behaviors to influence subordinates. The adoption of an appropriate style is required to respond to subordinates' needs (House, 1971).

The **Leader Participation Model**, also known as The Vroom–Yetton contingency model, was developed by Victor Vroom and Phillip Yetton in 1973 (Vroom and Yetton, 1973) and later in 1988 with Arthur Jago (Vroom and Jago, 1988). It stated that the best leadership style depends on the situation. This model supports a manager in making the correct decision as to the leadership style to adopt incorporating additional factors unrelated to the subordinate, such as the amount of time available, the importance of the technical quality of the decision, and the extent to which the manager possessed sufficient information to make the appropriate decision (Vroom and Jago, 1988; Vroom and Yetton, 1973).

The main limitation of the Contingency Theories is that the findings were mixed and inconclusive (Yukl, 2010). When the situation changes rapidly and if managerial work changes rapidly in a short time, it is impractical and challenging to apply or change leadership style at the same pace (Yukl, 2010). Nawaz *et al.* (2016) believed that contingency theorists assumed that the leader was the focus of the leader-subordinate relationship, while situational theorists opined that the subordinates played a pivotal role in defining the relationship, thus focusing on the significance of group dynamics.

The Contingency Theories prompt managers and leaders to assess various variables when adopting the suitable leadership style for a particular situation. They highlight the importance of adaptability in effectively influencing the behavior of subordinates. These theories provide practical guidance on how to implement the appropriate leadership style.

2.3.6 Leader-Member Exchange Theory

Liden and Maslyn (1998) devised the Leader-Member Exchange (LMX) theory suggesting that leaders do not use the same style in dealing with all subordinates, but rather develop a different type of relationship or exchange with each subordinate (Akdol

and Sebnem Arikboga, 2017; Graen and Scandura, 1987; Graen *et al.*, 1982; Liden and Graen, 1980; Dansereau *et al.*, 1975; Graen and Cashman, 1975). The LMX theory contributed significantly to focus on the nature of the dyadic interactions between leaders and their followers (Graen and Cashman, 1975; Dansereau *et al.*, 1975). Because of time pressure, a leader and some members build a special relationship characterized by mutual trust, respect, liking, and reciprocal influence; this group with a high-quality relationship, is known as high LMX or an in-group, and those members who are not part of this group and their relationship is based strictly on employment contracts come into low LMX or an out-group and form low-quality relationships (Dansereau *et al.*, 1975). The LMX theory can be considered a process approach. LMX theory can also be characterized as a transactional approach because both the leader and the followers are seen as active participants (Hollander, 1980).

The LMX theory has received extensive empirical support (Megheirkouni, 2017; Graen and Uhl-Bien, 1995). Up to 90% of managers treat their team members as members of either an in-group or out-group (Manzoni and Barsoux, 1998). The ‘in-group’ has stronger relationships with the leader. By contrast, the ‘out-group’ experiences weaker relationships with the leader, and consequently attracts fewer valued resources from their leader (Graen and Uhl-Bien, 1995), and are managed more formally through a transactional relationship of rules and policies (Manzoni and Barsoux, 1998).

LMX Theory differs fundamentally from the trait approach, where leader characteristics or qualities are taken as the starting point and are considered key factors in determining which people are effective leaders across situations (Northouse, 2004). Van Breukelen *et al.*'s (2006) description of the LMX theory shows that leader behaviors and traits do play a role. The differentiator for the LMX theory is that its advocates consider the relationship domain as fundamentally different from the leader domain and the

follower domain (Graen and Uhl-Bien, 1995). Moreover, they argue that the quality of the leader-member working relationship is more predictive of organizational outcomes than leader traits or behaviors (House and Aditya, 1997).

Leader–follower approach-related theories received much support since many found that Servant leaders or team leaders influence employee performance (Yukl, 2010) but fail to describe how high-quality leader-subordinate relationships can be created and evolve (Northouse, 2010; Yukl, 2010). This approach to leadership was criticized for failing to consider how situational factors may influence the type and quality of relationships formed between a leader and a subordinate (Yukl, 2010).

2.3.7 Charismatic Model or Heroic Leadership Theory

To address the emerging challenges in the 1980s and 1990s, a group of American psychologists developed the "new paradigm" models (Alimo-Metcalfe, 2013). These models prioritize the mobilization of an organization towards a future direction and effectively manage change (Bryman, 1993). These models emphasize different aspects of “neo-charismatic” leadership (House and Aditya, 1997), including charisma (Conger and Kanungo, 1998; House, 1976), vision (Sashkin *et al.*, 1988; Bennis and Nanus, 1985), and transformation and transaction (Bass, 1998; Bass, 1985). A charismatic leader is seen as one who possesses certain personality characteristics and acts in ways that result in trust, obedience, and confidence in success (Conger and Kanungo, 1998; House, 1976). Visionary leadership shows the path to an attractive and believable future state, which organizational stakeholders will help achieve (Sashkin *et al.*, 1988; Bennis and Nanus, 1985).

Reviews of published leadership research (Gardner *et al.*, 2010; Avolio *et al.*, 2009) have stated that the most commonly adopted “neo-charismatic” model is Bass’s model of Transformational Leadership (Bass, 1998; Bass, 1985). Transformational

leaders are distinguished by their ability to inspire team members and followers, encourage awareness of their team's and organization's mission or vision, help individuals achieve elevated levels of competence and potential, and promote a focus on collective interests that benefit the group as a whole, rather than just individual concerns (Bass, 1985). Transformational Leadership is regarded as superior to Transactional Leadership because the latter results in expected outcomes, whereas the former results in performance that goes beyond expectations (Bass, 1985).

One of the major strengths of Bass's (1985) model of Transformational Leadership is that it shifted the direction of leadership thinking from a practical focus on influencing others by adopting a transactional approach to an emphasis on the importance of leadership as having a moral dimension and being concerned with the greater good. It also stresses the needs of the followers by providing a sense of meaning in what they do in their organizational role, and actively seeking opportunities to develop them (Bass, 1998; Bass, 1985). There is evidence from studies using the Multifactor Leadership Questionnaire (MLQ) that Transformational Leadership is significantly associated with subordinate satisfaction, motivation, commitment, and performance (Tims *et al.*, 2011; Yukl, 1999b; Bass, 1998; Lowe *et al.*, 1996).

Conceptually, these models have been criticized for resulting in models of distance (Shamir, 1995), since they were based largely on observations of top-level executives, yet were commonly adopted, in research and leadership-development activities that related to "nearby leaders" such as individuals' immediate bosses (Northouse, 2010; Alimo-Metcalfe and Alban-Metcalfe, 2005). The literature on Transformational Leadership has been criticized for lacking conceptual clarity and for treating Transformational Leadership as a personality trait rather than as a behavior that can be learned (Bryman, 1993), a view that was invalidated by Bass and Avolio (1993).

Bass (1998) was mindful of how the attraction of Transformational Leadership could be manipulated to serve the needs of the leader, rather than their direct reports and their organization.

Further criticism, voiced by Yukl (1999b), is that the Transformational model is elitist and antidemocratic, and suffers from “heroic leadership” bias because the theory stresses that it is the leader who influences the followers to do exceptional things, a perspective it shares in common with both “Charismatic” and “Visionary” models. Bass and Avolio (1993) have contested the criticism of elitism, arguing that Transformational Leadership can be directive or participative and democratic or authoritarian. As per Northouse (2010), nevertheless, it is important to note that the criticism of elitism, which arises due to the initial samples used in developing the model, raises legitimate concerns about the model's applicability to a broader context.

A more fundamental critique of these models is their failure to recognize the mutual influence within the follower-leader relationship or the concept of shared leadership (Alimo-Metcalfe, 2013). The methodology adopted in developing many of the neo-charismatic models was often based on self-reports (Alimo-Metcalfe, 2013). In their review of the self-rating agreement in leadership, Fleenor *et al.* (2010) stated that it is generally accepted that self-ratings of leadership are susceptible to leniency bias and therefore are not considered to be accurate predictors of leadership outcomes, citing several studies that have provided evidence of their lack of validity with others' ratings or objective measures of outcome criteria (Yammarino and Atwater, 2001). Transactional leaders are said to be instrumental and frequently focus on the exchange relationships with their subordinates (Bass and Avolio, 1993). In contrast, Transformational leaders are argued to be visionary and enthusiastic, with an inherent ability to motivate subordinates (Howell and Avolio, 1993).

2.3.8 Emotional Intelligence Theory

The Emotional Intelligence Theory is one of the emerging theories of leadership from the late 1990s. According to Jiang (2014), this theory sets leaders apart based on their utilization of emotional skills rather than intellectual abilities when addressing various situations. It identifies and classifies nineteen related components into four distinct factors under two competencies (Goleman *et al.*, 2002) namely self-awareness and self-management under personal competencies, and social awareness and relationship management under social competencies. The six leadership styles based on Emotional Intelligence Theory are Authoritative/Visionary, Democratic, Coaching, Affiliative, Commanding, and Pacesetter (Goleman *et al.*, 2002). The final two types are regarded as toxic because they create a dissonant or harmful impact on their followers (Goleman *et al.*, 2002).

2.3.9 Competency Theory

In the 2000s, the Competency Theory of leadership emerged. The competency school absorbs all characteristics of former theories with a group of fifteen leadership competencies (Jiang, 2014). This large group of competencies can be divided into three main groups: Emotional competencies, Managerial competencies, and Intellectual competencies (Jiang, 2014). Various combinations of competencies enable the development of diverse leadership styles tailored to the demands of specific projects (Jiang, 2014). Given that the competencies mentioned are acquirable, the Competency Theory reinforces the validity of the Behavioral or Style Theory. Additionally, leadership styles like Transactional and Transformational can be crafted through the Competency Theory. Dulewicz and Higgs (2004) introduced three fundamental leadership styles known as goal-oriented, involving, and engaging based on the Competency Theory.

2.3.10 Post-Heroic Leadership Theories

Following a string of corporate scandals along with the global financial crisis in the late 2000s, there was a rising dissatisfaction with the legacy of the ‘heroic’ models (Alimo-Metcalfe, 2013). A new genre of leadership theory emerged in both professional managerial and academic publications, which criticized the notion of attributing organizational success or failure to the presence of a “savior” figure (Bligh *et al.*, 2011). Other researchers have promoted the notion of “quiet leadership” (Badaracco, 2002) and the ethical responsibilities of leadership. Emerging concepts of leadership place a significant emphasis on the ethical conduct of leaders, while simultaneously directing increased focus on the perception of leadership as a social process characterized by its dynamism and flexibility (Alimo-Metcalfe, 2013). Leadership is no longer perceived as an act of "doing to" others, but rather as a result of how individuals collaboratively "do with" others, collaborating and establishing relationships as colleagues (Alimo-Metcalfe, 2013). This new perspective encompasses various value-based models, some of which are summarized below.

Authentic Leadership theory emerged as a response to the demand for greater attention to be paid to the importance of integrity and transparency in business and public life, and the means of holding leaders accountable for their behaviors and actions (Alimo-Metcalfe, 2013). **Ethical Leadership** revolves around due respect and faith in ethics, beliefs, and values. It takes into consideration the rights and dignity of other people. Trust, faith, fairness, honesty, and consideration are the main elements of Ethical Leadership (Kumar, 2018). The idea of **Servant Leadership** was developed by Greenleaf (1970). The main argument of Greenleaf (1970) is that true leadership becomes apparent from those whose main motivation is an extreme desire to be of benefit to others and the

great leader is first experienced as a servant to others and this basic fact is of the greatest importance to his or her greatness (Akdol and Sebnem Arikboga, 2017).

The concept of **Distributed and Shared Leadership** is grounded in the notion of leadership as a fluid and emergent property of a social process (Spillane, 2006), enacted by groups of individuals, or a network of interacting people (Gronn, 2000). This leadership conceptually overlaps with other similar approaches, including the notions of “shared” (Pearce and Conger, 2003), “collaborative” (Raelin, 2006), and “democratic” leadership (Geer, 1996). Thorpe *et al.* (2011) assert that the terms “distributed” and “shared” leadership denote different, though related, concepts. Distributed leadership is best regarded as describing a “structural” arrangement, whereby leadership responsibilities are delegated to individuals in different roles and at different levels in an organization; one of its strongest proponents describes it as “a new architecture for leadership” (Gronn, 2000). On the other hand, shared leadership describes a process through which leadership behavior is enacted.

2.4 Project and Project Teams

This section of the literature review covers the overview of projects, project management, and project teams.

2.4.1 Project

According to the Project Management Institute (2021), projects are temporary endeavors undertaken to create unique products, services, or results and have definite start and end dates. Projects can be stand-alone or be part of a program or portfolio. A project is considered complete when its goals and objectives are accomplished and meet stakeholders’ expectations or it determines the project is no longer viable. Huemann *et al.* (2007) suggest that the project is a social system, and includes several areas focused on organizational behavior, leadership, communication, team building, and human resource

management. Projects can be considered as temporary organizations and as strategic building blocks (Cleland, 2007). Due to this evolution, nowadays, projects can be defined as a one-time, complex, unique sequence of activities carried out in a project organization with time and budget constraints and they implement a definite output or project result (Blaskovics, 2014).

In the 21st-century competitive business landscape, organizations seek flexibility through temporary arrangements, such as projects and programs. While these temporary structures were once primarily associated with project-based industries like construction, management consulting, filmmaking, and software engineering, a growing number of project formations is now evident across almost all industries (Bakker, 2010). Projects are prevalent means for establishing organizational flexibility, inducing organizational change, generating innovation, and strategy implementation (Whittington *et al.*, 1999). Temporary forms of organization are no longer limited to managing exceptional projects but now constitute a substantial portion of routine operations within organizations (Engwall, 2003).

Projects are distinct in their tasks and have a defined timeframe. They are characterized by groups of cross-disciplinary experts and resources coming together to form a team. Projects are often carried out beyond hierarchical lines of authority and cut across organizational boundaries (Hanisch and Wald, 2011; Engwall, 2003).

2.4.2 Project Management

Project management is part of middle-level management and requires the development of a special leadership quality to manage both personnel and top management. Project management is different from general management as it focuses on a temporary leader, specifically the PM, leading a temporary team. Implementing project

management allows organizations to be more efficient, effective, and competitive in a shifting, complex, and unpredictable environment (Ika, 2009).

According to Project Management Institute (2021), project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements and guide the project work to deliver the intended outcomes. Project management is a process that includes planning, putting the project plan into action, monitoring the activities, and measuring progress and performance. Project management is the art of directing and coordinating resources throughout the project lifecycle by using modern management techniques to achieve agreed project objectives of scope, cost, time, quality, resources, materials, communication, risk, documentation, and satisfaction (Nyanama, 2022). Project management is a strategic tool for organizational success in projects by adopting strategic approaches to realizing strategic objectives and overcoming business traditional bureaucratic mechanisms and operations through effective leadership (Haniff and Galloway, 2015). Hence, project management is defined as a process where PMs utilize approaches, methods, skills, and knowledge to achieve project goals.

2.4.3 Project Teams

A project team is a set of individuals performing the work of the project to achieve its objectives (Project Management Institute, 2021). Project teams comprise members that typically belong to a different primary team, have unique functional backgrounds, have been put together to accomplish a specific deliverable, and will work together for a defined period (Kerzner, 2017). This ad-hoc, team-based approach is considered necessary and efficient in the 21st-century work environment, where organizations need to quickly adapt and innovate in a fast-paced and globalized competitive landscape (Pollack and Matous, 2019). Hence, projects can be seen as

aggregates of individuals temporarily collaborating for a shared cause and the same purpose, goal, and mission (Lussier & Achua, 2010; Packendorff, 1995).

Project teams carry out time-limited undertakings and disperse upon completion (Chen *et al.*, 2004) as the limited duration is mostly defined from the outset. This is often accompanied by non-routine processes and uncertain working conditions (Pich *et al.*, 2002), whereas complexity in terms of roles and participant backgrounds is often caused by a variety of different experts working together (Hanisch and Wald, 2014; Hanisch and Wald, 2011) and differing (hierarchical) roles outside the temporary organization (Baccarini, 1996; Packendorff, 1995). Project teams comprise individuals with unique strengths and weaknesses, and unique values and personalities, which will inevitably lead to challenges and conflict (Chiocchio *et al.*, 2011). The efficacy of a team can significantly impact the time and budget of projects (Pollack and Matous, 2019).

2.5 Hybrid Work, Hybrid Teams and Leadership

This section of the literature review covers the definition of traditional, virtual, and hybrid work, hybrid teams, and hybrid team leadership.

2.5.1 Traditional Face-to-face Work and Teams

Traditional face-to-face teams are co-located and limited to a specific location (Bard, 2015; Fiol and O'Connor, 2005). In a traditional team, the members may not all come from the same culture. Nonetheless, the team is influenced by the culture of the local organization or the country in which it runs. The physical constraint of a single location in face-to-face teams can hinder their ability to operate around the clock (Settle-Murphy, 2012). Communications in face-to-face teams are typically multi-channel, where individuals communicate over additional channels and are richer in visual and auditory cues, while the social presence and contextual understanding also tend to be stronger in face-to-face teams (Purvanova and Bono, 2009).

2.5.2 Virtual Work and Teams

A virtual team is defined as a collaborative team whose members are geographically dispersed (Townsend *et al.*, 1998), representing diverse cultures, knowledge bases, and physical locations, all working together with a shared objective to complete interdependent tasks by using technology as a central tool for communication and interaction (Bard, 2015; Settle-Murphy, 2012; Huang *et al.*, 2010; Townsend *et al.*, 1998). According to some literature, virtual or distributed teams are groups of employees, typically knowledge workers with unique skills, who collaborate primarily through electronic means and are dispersed by geography and time (Lilian, 2014; Aubert and Kelsey, 2003; Zigurs, 2003). As such, physical contact in virtual teams is reduced or lacking altogether, with collaboration enabled by technology (Lilian, 2014). Virtual teams are real teams with real people having all of the characteristics, demands, and challenges of more traditional organizational teams (Zaccaro and Bader, 2003). Researchers have proposed a level of virtuality while describing virtual teams (Griffith *et al.*, 2003), where the level of virtuality is measured with two traditional dimensions, spatial distance and use of virtual tools like email, teleconferencing, and video conferencing (Nauman and Khan, 2006) as shown in Figure 2.3.

Virtual teams offer a wide range of benefits (Townsend *et al.*, 1998) such as flexible work arrangements, access to previously unavailable expertise, and enhanced cross-functional interaction. On the other hand, leadership challenges are pertinent in organizations in adapting to the virtual work context. Lee-Kelley and Sankey (2008) conducted a study to compare challenges in virtual projects with traditional ones and to assess the suitability of virtual projects in specific contexts. Lee-Kelley and Sankey (2008) concluded that virtual teams are valuable for projects that demand cross-functional or cross-boundary expertise.

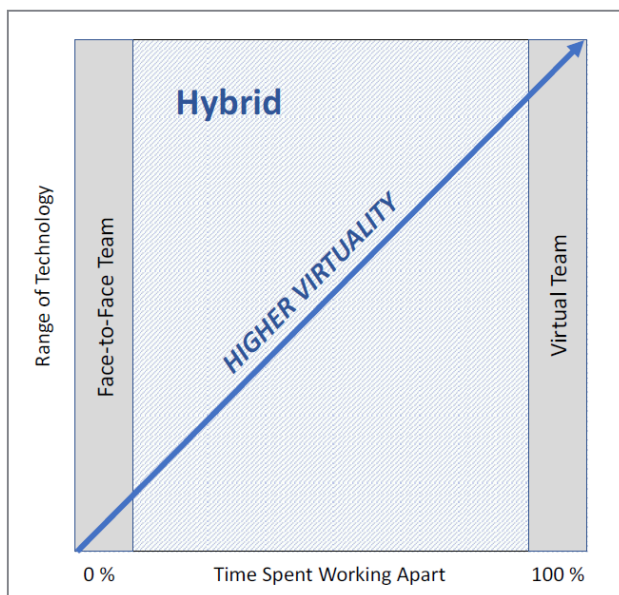
2.5.3 Hybrid Work and Hybrid Teams

“Hybrid work is here to stay” (Hilberath *et al.*, 2021). Hybrid teams represent a modern and flexible approach to work, blending in-person and virtual collaboration. They have become increasingly popular in a post-pandemic world, offering employees greater freedom and organizations improved adaptability. This dynamic work model reflects the evolving landscape of how teams come together and achieve their goals.

According to Winkler *et al.* (2022), hybrid teams are “The New Normal”, as 49% of the respondents have expressed their preference to work in a hybrid team after the pandemic, compared to 9% of respondents who already worked in a hybrid team before the pandemic. As cited in Winkler *et al.* (2022) nine out of ten executives surveyed in the Microsoft study “Work. Reworked 2020” also assume that hybrid working will continue to exist in the long term. Although virtual teams offer numerous benefits, organizations prefer a hybrid approach that combines traditional and virtual teams. There is growing recognition that many teams now operate in this hybrid category, leveraging technology based on their task requirements and team structure.

Minder (2020) identified the specific constellation of team members working together at the same location and other members working remotely as a key characteristic of hybrid teams, implying a collaboration supported by digital media as another characteristic (Figure 2.3). A hybrid project team is characterized by team members who meet and communicate face-to-face occasionally, whilst working virtually the majority of the time (Bard, 2015; Cousins *et al.*, 2007; Fiol and O’Connor, 2005). Hybrid project teams are, therefore, perceived as a combination of the characteristics found in a traditional face-to-face team and a virtual team, and the level of virtuality is decided by the organization itself (Bard, 2015). Traditionally, a hybrid team was characterized as a blend of co-located and remote workers (Wiatr and Skowron-Mielnik, 2023). However, it

now encompasses individuals who seek a mix of office and remote work. A hybrid team comprises both in-office and remote employees, with the key feature being employee choice (Wiatr and Skowron-Mielnik, 2023), and digital communication technology serves as a tool to facilitate collaboration among team members. This model places employees' preferences at the core of the hybrid team concept (Wiatr and Skowron-Mielnik, 2023).



*Figure 2.3
Dimensions of Virtualness (Hybrid Team Definition)*

Source: Stich, 2022 adapted from Griffith and Neale, 2001

Organizations and leaders today are faced with the challenge of optimizing the hybrid working models (Hilberath *et al.*, 2021) as shown in Figure 2.3, in which fully in-person and remote work will be the two ends of a fluid spectrum of options. When executed effectively, hybrid work models have the potential to enhance talent acquisition, foster innovation, and generate value for all stakeholders within organizations (Hilberath

et al., 2021). Leadership, culture, and purpose are the key building blocks of the hybrid work model (Winkler *et al.*, 2022).

Much of the literature on virtual teams has been prescriptive (Kirkman *et al.*, 2002), not enough empirical research on virtual teams exists (Stanton and Steinbrenner, 2002) and most are limited in scope (Martins *et al.*, 2004). Very little research on employees has compared virtual teams with co-located teams and only a few studies have compared different forms of virtual and hybrid teams (Axtell *et al.*, 2005). Kirkman *et al.* (2002) report in their study of virtual teams that some are face-to-face teams, some are geographically distributed teams, and some individuals telecommute, but do not compare them. Thus, researchers have called for more research investigating how different forms of virtual and hybrid teams affect team functioning (Fiol and O'Connor, 2005; Martins *et al.*, 2004). Pauleen (2003a) has called for more research on semi-virtual or hybrid teams because these types of groups may interact differently from completely distributed groups (Webster and Staples, 2006).

2.5.4 Hybrid Team Leadership

Hybrid team leadership has become increasingly relevant today as organizations adopt flexible work arrangements in response to changing work dynamics and technological advancements. Leading hybrid teams requires a unique set of skills and strategies; it involves a blend of effective communication, technology utilization, trust-building, and the ability to adapt to the unique dynamics of remote and in-person collaboration.

The concept of e-leadership is on the rise, as people conduct leadership tasks and activities through technology-enabled electronic channels to manage their virtual teams. Avolio and Kahai (2003) attribute the differences between traditional leadership and leadership in the digital age to a changing work environment with an ultimate shift in the

way leaders and followers engage with one another within and between organizations through digital technology. The fundamentals of leadership do not seem to change significantly (Avolio and Kahai, 2003) as the goals of leadership remain the same, while the medium for implementing the goals is different (Trivedi and Desai, 2012).

Leaders of hybrid teams face the challenge of being competent at managing both traditional co-located team members and virtual team members and must be able to demonstrate success with both styles of leadership (Lee, 2021). Upon reflecting on the existing literature, it is evident that though there have been studies comparing co-located and virtual teams (Nauman and Khan, 2006), these studies have either been strictly from a performance angle (Straus and McGrath, 1994) or a team dynamics perspective (Cramton, 2001; Jarvenpaa and Leidner, 1999). Only a few articles have been written about leadership and virtual teams (Avolio and Kahai, 2003; Cascio and Shurygailo, 2003; Zigurs, 2003) and leadership in hybrid teams (Lee, 2021). These studies describe the differences between virtual and traditional teams. Moreover, few studies have examined the effects of partially distributed teams but none have examined their impact on virtual leadership (Cohen and Prusak, 2002; Kiesler and Cummings, 2002).

Current scholars contend that effective team leadership might be the key component of organizational team success and ineffective leadership is frequently seen as a major obstacle to team effectiveness (Zaccaro *et al.*, 2001). Very little has been known about leadership in virtual teams even though leadership appears to be a major determinant of virtual team success (Cascio and Shurygailo, 2003; Zigurs, 2003). Except for a few studies that examine the effect of Transformational and Transactional leadership in the context of a Group Decision Support System (GDSS) (Kahai *et al.*, 2004), most of the studies follow no existing theories and employ an exploratory approach to observe the emergence or functioning of leadership in the virtual team

context (Yoo and Alavi, 2004; Pauleen, 2003a; Pauleen, 2003b; Tyran *et al.*, 2003; Weisband, 2002). The exploratory studies, however, do not offer conclusive causal links between the observed leadership and outcomes (Yoo and Alavi, 2004).

2.6 Banking Industry and Leadership

The financial industry is a section of the economy made up of firms and institutions that provide financial services to commercial and retail customers (Montenegro *et al.*, 2020). The banking industry deals with borrowing and lending money. As such banks are central to financial stability in the economy and the modern economy cannot do without banks; hence, strong, effective, and holistic prudential supervision is essential (Ellis, 2016) – leading to rigorous regulatory and compliance requirements. The banking sector has long been a crucial cornerstone of the global economy (Belias *et al.*, 2015). While banks are primarily profit-driven entities, their role is often examined as if they were organizations serving the public interest. Banks play a crucial role in money creation and the payment system operation. They significantly influence investment financing and overall economic growth.

The banking industry is also known as “a work environment where employees are often busy, work under pressure, and are constantly in an emotionally laborious state. This is related to the demand for work, prudence in financial management, and extended time of interaction between bank employees and customers, directly on a daily basis” (Dartey-Baah and Mekpor, 2017). “Banking employees must remain committed to their employers, to live the brand, particularly during periods of economic uncertainty and customer frustration. Effective leadership fosters employee commitment and brand-supporting behaviors” (Vaccaro *et al.*, 2012). So, leadership can be a key means of meeting the strategic demands and challenges within the banking industry. Research has shown that a well-functioning banking institution is marked by the recognition of the

critical role of human resources by its leadership, which is a crucial acknowledgment of the importance of leadership and people's behavior during times of crisis, to protect against employee turnover and customer attrition (Bushra *et al.*, 2011).

In recent years, the banking industry has been adopting project management practices and setting up Project Management Offices (Montenegro *et al.*, 2020). The implementation of project management methodologies within these organizations has led to enhancements in various areas, including effectiveness, efficiency, flexibility, and quality (Montenegro *et al.*, 2020); At the heart of every project lies the Project Manager, whose role is pivotal in determining the success of a project.

Some studies on leadership styles have been carried out in the banking industry. The study by Geyery and Steyrer (1998) examined the relations between Transformational and Transactional leadership and performance indicators of 20 different banks, using a sample of some 1500 observations, using the Multifactor Leadership Questionnaire (MLQ). The study found the core dimensions of Transformational leadership are more robustly related to long-term than short-term performance (Geyery and Steyrer, 1998). Girardi and Rubim Sarate (2023) researched a Brazilian financial institution about Transformational leadership. The empirical, descriptive, and quantitative study carried out by Girardi and Rubim Sarate (2023) indicated a high perception of Transformational leadership. Followers perceived their leader as a transformational agent, who inspired, encouraged, considered, and motivated them (Girardi and Rubim Sarate, 2023).

2.7 Project Leadership of Hybrid Teams

Project leadership focuses on the people aspect of the project like influencing, motivating, enabling, and directing the project team, and entails leading team members working on the project and supporting the project to deliver a collective goal. A PM

performing a leadership role is expected to both lead and manage (Ciulla, 2020) as both aspects are important in delivering the project outcome. With the prominence of hybrid work, both traditional leadership and virtual leadership are crucial for the success of any project. Hence, in the current context, virtual leadership is a critical task that showcases a leader's effectiveness. The key to project success in the current dynamic hybrid environment is the leader, who can adapt traditional management and leadership theories to the virtual environment (Lee, 2021).

According to the Project Management Principles listed in The Standard for Project Management and PMBOK Guide (Project Management Institute, 2021), leadership comprises the attitude, talent, character, and behavior to influence individuals within and outside the project team toward the desired outcomes; motivate them toward a common goal, and influence them to align their interests in favor of a collective effort to achieve success as a project team. Littman and Littman (2019) stated that project leadership involves “the 4 I’s: intentions (goals of the project), influence (on other people, organization, society), impact (outcome of the project), and integrity (honest dealings in the project)”. These are the principles that PMs, as project leaders, should aspire to. The views of various authors above imply that Authentic and Ethical leadership styles are needed in the current project context.

Effective leadership promotes project success and contributes to positive project outcomes, by influencing and motivating the project team (Project Management Institute, 2021). Armandi *et al.* (2003) suggested that the success of a project pivots on the effectiveness of the leader through their foresight, vision, passion, and skills to inspire the team to succeed. The success or failure of an organization directly relates to the effectiveness of the leaders (Alimo-Metcalfe, 2013).

The focus of some project research has been on the way PMs lead in the context of space as it is contingent on the context in which leadership is performed (Turner, 2009). This view has been supported by Vaagaasar *et al.* (2020) who have introduced space as a generative force in project management, and explored how space may condition PMs' leadership constructs. Table 2.1 is refined based on the work of Vaagaasar *et al.* (2020). A study by De Paoli and Ropo (2015) highlighted the importance of being physically present as a leader.

*Table 2.1
Summary of Different Workspaces and Work Environments (adapted from Vaagaasar et al., 2020)*

Work Environment/ Work Space	Characteristics of Performed Leadership	Good for (Pros) (Advantages)	Not Good For (Cons) (Disadvantages)	Leadership/ Mental Construct
Traditional Face-to-Face work <ul style="list-style-type: none"> Physically close Not dependent on technology 	<ul style="list-style-type: none"> Creative Information sharing Relational working Knowledge integration 	<ul style="list-style-type: none"> Interdisciplinary teams Motivating and engaging team Integrating team by collaborative tasks Workshops/ ideation Easier to follow-up Efficient surroundings for immediate support of people Inspiring trust and creativity Problem detection and solution 	<ul style="list-style-type: none"> Confidential conversation Avoiding group thinking due to social desirability effects Conflicts between people Negative for focus work 	<ul style="list-style-type: none"> Socially intelligent leadership through empathy - the possibility to understand and see things from others' perspectives. Informal cues Emotionally intelligent leadership through sensitivity - experience the mood and energy, and get to know about the small issues. Shows power and authority: physical presence
Hybrid work <ul style="list-style-type: none"> Dependent on technology Combination of co-located members and remote members 	<ul style="list-style-type: none"> Use several office or home locations Flexibility Requires standardized and reliable technology 	<ul style="list-style-type: none"> Less need for frequent coordination Has the advantages of both traditional and virtual settings Gives the best knowledge from 	<ul style="list-style-type: none"> Needs more structure Bigger group dominates Creates sub-grouping according to locations 	<ul style="list-style-type: none"> Demands the social and emotional intelligence of the leader Leadership constructs differ by space and may differ when the Project

		the interactive setting		Manager moves from one space to the next
Virtual work <ul style="list-style-type: none"> • Fully dependent on technology • Fully dispersed team 	<ul style="list-style-type: none"> • Factual • Structured task execution • Formal – development of documents, discipline in meetings, etc 	<ul style="list-style-type: none"> • Multi-disciplinary teams • Status meetings and status quo meetings • Less chit-chats 	<ul style="list-style-type: none"> • Observation of informal cues • Loss of many non-verbal cues • Motivation of team • Relationship and trust building • Reduced mechanisms for informal conversation and social interaction • Disagreements overseen • Hurdles in interactive tasks • Different time zone • Technology dependency • Obtaining consensus • Different work processes and cultures 	<ul style="list-style-type: none"> • Setting structures • Formal and detached • Clarification of issues • More transactional

Investigating leadership approaches today, it is found that project leadership of hybrid teams is closely related to digital leadership as the PM leads the team remotely facilitated by technology. George (2018) suggests that a digital leader needs the ability to delegate work and authority to others when specific circumstances are encountered. Digital leaders are likely self-organized leaders, adopting people-first principles, engaging trust and collaboration, and deploying innovative situational leadership (George, 2018). Günzel-Jensen *et al.* (2018) suggest that Digital Leadership links Transactional, Transformational, and empowering (Authentic) leadership, with innovative behavior. They may adopt one or more leadership styles. Very broad leadership approaches (Authentic, Transactional, and Transformational) can typically incorporate many more specific approaches (George, 2018).

The findings of George (2018) and Günzel-Jensen *et al.* (2018) align with the findings of Wiatr and Skowron-Mielnik (2023), who opine that “hybrid teams need authentic leaders who elicit trust among employees, alleviate negative emotions such as anxiety and threat, and enhance the positive ones such as hope and enthusiasm”. Hybrid teams need leaders who are ready to share power by giving autonomy as well as psychologically empowering employees, so they have the confidence, determination, a sense of purpose for their work, competence, and the feeling of impact on the organization (Wiatr and Skowron-Mielnik, 2023).

2.8 Project Leadership Styles to Lead Hybrid Teams

“Leadership styles are now under scrutiny and debated much more than ever before.” (Kumar and Provodnikova, 2021). As cited in the review of leadership styles by Vasilescu (2019), the term was introduced by G.W. Allport (1937), about different types of personality and behavior. The literature about leadership styles is very broad; finding a conclusive definition of leadership style is difficult as the concepts of leadership type, theory, approach, and style have been used interchangeably in the literature. Around the 1960s-70s, these terms were used in a non-discriminatory manner. Over time, the distinction between these has emerged – for example, leadership type covers the qualities, knowledge, and aptitudes of leaders while the style of leadership covers “the way of expressing and manifesting the type of leadership” (Vasilescu, 2019). However, the term is still used interchangeably by some authors.

Leadership style is a behaviorally oriented approach. It refers to how leaders behave toward potential followers (Cooper, 2012) in their effort to influence them (Hunt and Fitzgerald, 2018). A style represents a distinctive behavior, a particular method of acting (Vasilescu, 2019). Mullins (2010) defined leadership style as the way leaders carry out the functions of leadership and the manner they choose to behave toward followers.

Leadership style is the combination of traits, characteristics, skills, and behaviors that leaders use when interacting with their subordinates (Jeremy, 2012).

While many leadership styles, attributes, traits, and philosophies account for the extensive literature surrounding leadership (Judge and Piccolo, 2004; Hofstede, 1984), Velu *et al.* (2017) believed that “style” is roughly equivalent to the leader’s behavior. The style approach explains ways leaders combine task and relationship behaviors to influence team members in their efforts to reach a goal (Velu *et al.*, 2017). The leadership theory follows the task-versus-relationship categorization creating a grid encompassing key styles of leadership (Northouse, 2004). The progress of a team or group in any organization is largely dependent on the style of leadership employed by the organizational leader (Hunt and Fitzgerald, 2018). Therefore, the organizational performance and results fall on the leadership of the organization.

The literature review shows various researchers have studied leadership to identify numerous leadership styles and how they can lead to better results. Dulewicz and Higgs (2004) as cited in Müller and Turner (2007a) note their study of 250 managers identified three leadership styles; goal-oriented, involving, and engaging, and concluded that goal-oriented leaders are best on low complexity projects, involving leaders best on medium complexity projects and engaging leaders are best on high complexity projects. From the point of decision-making and how much the leader involves the team comes the work of Lewin *et al.* (1939) which identified three leadership styles; Authoritarian, Democratic, and Laissez-faire. From the result of their study, the Democratic style was shown to be the most effective while the excessive Authoritarian style led the followers to revolt and the Laissez-faire approach indicated a disjointed result as compared to when there was an active leadership involvement (Lewin *et al.*, 1939).

Burns (1978) conceptualized Transformational leadership and Transactional leadership and stated that they are at opposite ends of a single continuum, believing that leaders display either Transformational or Transactional behavior. Contrary to this idea, Bass (1985) suggested that Transformational leadership and Transactional leadership are two discrete dimensions and leaders may exhibit both behaviors at varying degrees. Furthermore, Bass (1998) reiterated that effective leaders can exhibit both Transactional and Transformational leadership styles as they need to practice social exchange elements while working with team members, and also need to gain commitment from them (Bass, 1998). These are very relevant to the hybrid leadership as well. Hence, it can be inferred that effective leaders combine both Transformational and Transactional leadership styles (Snodgrass and Shachar, 2008).

In the project context, leadership style is the term describing how the leader manages the project (Jiang, 2014). Past studies on leadership in projects focused mainly on the personality and leadership style of PMs (Jiang, 2014). A study of leadership styles by Keegan and Den Hartog (2004) identified a preference for Transactional styles among PMs in general. This was supported by the research of other authors too, where their findings indicate that PMs tend to use Transactional leadership in simpler projects, while for more complex projects, Transformational leadership styles are practiced (Müller *et al.*, 2018; Ding *et al.*, 2017; Turner and Müller, 2006; Jaskyte, 2004). Other studies assumed more situation-dependent leadership styles and investigated the underlying personality factors, based on emotional, intellectual, and managerial competencies to identify the range of possible leadership styles by PMs (Dulewicz and Higgs, 2005). Related studies such as the one by Müller and Turner (2010b) identified the emotional, intellectual, and managerial leadership profiles of successful PMs. Drouin *et al.* (2018) carried out a case study using mixed methods (quantitative-qualitative) research in four

countries including Australia and the result showed that for Canadian and Australian projects, a combination of Autocratic and Democratic leadership styles were used by vertical leaders like PMs. Kumar and Provodnikova (2021) opine that the Servant leadership style suits a mature team. The Project Management Institute requires PMs to work ethically and professionally and follow the “Project Management Institute Code of Ethics and Professional Conduct” (Project Management Institute, 2021) to comply with laws, regulations, and organizational and professional policies. This necessitates the PMs to apply an Ethical leadership style.

Ethical conduct and regulatory compliance are the key priorities in the banking industry. The focus on moral conduct in the Australian banking industry has become even more paramount since the Royal Commission into Misconduct in the Banking, Superannuation, and Financial Services Industry was established by the Australian government in December 2017 (Hayne, 2019), with the purpose to investigate and report on misconduct in the banking, superannuation, and financial services sectors (Hayne, 2019). This has led to substantial reforms in the Australian banking industry, aiming to create a more ethical and customer-focused sector. This provides a reasonable explanation for promoting Ethical leadership in the project domain in the Australian banking sector.

Leadership styles for managing virtual project teams are quite different from leading traditional co-located teams (Lee, 2021). Identifying and acknowledging the emerging leadership styles and trends such as empowerment, agile leaders, and value-based leadership, and their relevance is important. The move from traditional to virtual and now hybrid project leadership means the leadership style becomes more directive, being clearer on roles, responsibilities, and processes (Lee, 2021) as indicated by the earlier section of the literature review.

PMs, in the current context, display a wide range of leadership approaches and styles, which can be grouped against theoretical approaches (Zhu *et al.*, 2019; Dinh *et al.*, 2014). Based on the literature review, key theory-based leadership approaches and styles relevant to hybrid project teams are listed in Table 2.2. This table shows leadership approaches perceived to be relevant to the PMs in the banking industry, which can be cross-grouped into four main leadership styles as shown in Figure 2.1 and Figure 2.2 – Authentic, Ethical, Transactional, and Transformational. Table 2.2 also covers the LMX and Team Leadership approaches as, based on the above literature review, these seem to be relevant to hybrid project leadership.

Dinh *et al.* (2014) researched 752 leadership research articles published in 10 top-tiered journals between the years 2000 and 2012 and ranked each leadership approach in relative importance. The relevant leadership approaches for hybrid project teams with their rankings are also listed in Table 2.2. The commonality is almost all theories and approaches are incorporated with ethical/moral, transactional, transformational, team leadership, and leader-member exchange.

Table 2.2
Grouping of Relevant Leadership Theories from Literature Review (adapted from Dinh et al. (2014) and Zhu et al., (2019))

Leadership Theories	Theories – Leadership Approach Overlap				
	Key References (Examples)	Overarching Leadership Theories (Dinh <i>et al.</i> , 2014)	Major Shared Theories (Zhu <i>et al.</i> , 2019)	Leadership Overlap Identified (Zhu <i>et al.</i> , 2019)	Rank (Dinh <i>et al.</i> , 2014)
Authentic Leadership Emerging Theory Ranked#19 (Dinh <i>et al.</i> , 2014)	Avolio and Gardner (2005) Avolio <i>et al.</i> (2004) Gardner <i>et al.</i> (2005) Gardner <i>et al.</i> (2011) Walumbwa <i>et al.</i> (2008)	<i>Ethical/Moral Leadership Theories</i> (Emerging Theory – Ranked #5)	Self-determination theory Social exchange theory Role incongruity Theory Social exchange theory Self-determination theory Social identity theory Self-discrepancy theory	Transformational Servant Trait-theory Ethical Abusive Emergent Followership Implicit Identity-based Emotions & leadership Transactional	1 30 4 19 24 4 5 12 7 10 17

Theories – Leadership Approach Overlap					
Leadership Theories	Key References (Examples)	Overarching Leadership Theories (Dinh <i>et al.</i> , 2014)	Major Shared Theories (Zhu <i>et al.</i> , 2019)	Leadership Overlap Identified (Zhu <i>et al.</i> , 2019)	Rank (Dinh <i>et al.</i> , 2014)
			Social learning theory Affective events theory		
Ethical Leadership Emerging Theory Ranked#22 (Dinh <i>et al.</i> , 2014)	Brown and Treviño (2006) Brown <i>et al.</i> (2005) Kalshoven and Hartog (2009) Kalshoven <i>et al.</i> (2011) Mayer <i>et al.</i> (2012) Mayer <i>et al.</i> (2009) Piccolo <i>et al.</i> (2010) Schaubroeck <i>et al.</i> (2012)	<i>Ethical/Moral Leadership Theories</i> (Emerging Theory – Ranked #5)	Social exchange theory Social learning theory Cognitive moral development theory Social information processing theory Conservation of resources theory Affective events theory Social cognitive theory Social identity theory Upper echelons theory Self-regulation Theory Theory of moral reasoning Moral development Theory Theory of moral judgment Behavioral plasticity theory	Abusive Supervision Trait Theories Team Leadership Transactional Transformational Leader-Member Exchange	24 2 4 17 1 3
Leader-Member Exchange Established Theory Ranked#3 (Dinh <i>et al.</i> , 2014)	Dulebohn <i>et al.</i> (2012) Graen and Uhl-Bien (1995) Uhl-Bien (2006) Wang <i>et al.</i> (2005)	<i>Social Exchange/Relational Leadership Theories</i> (Existing Theory – Ranked #3)	Social exchange theory Network theory Open system theory Social cognitive theory	Emotions & leadership Team Leadership Transactional Transformational	10 4 17 1
Team Leadership Emerging Theory Ranked#4 (Dinh <i>et al.</i> , 2014)	Burke <i>et al.</i> (2006) Morgeson <i>et al.</i> (2010) Pearce and Conger (2003) Zaccaro <i>et al.</i> (2001)	<i>Team Leadership</i> (Emerging Theory – Ranked #2)	Functional leadership theory Goal setting theory Socio-technical systems theory Self-control theory Social learning theory Expectancy Theory Path-goal theory Equity theory Reinforcement theory Social cognitive theory Upper echelons theory	Shared Emotions & leadership Servant Ethical Abusive Supervision Charismatic Strategic Transformational Transactional Trait theories Followership Leader-Member Exchange	15 10 30 22 24 7 6 1 17 2 11 3
Transactional Leadership Established Theory Ranked#17 (Dinh <i>et al.</i> , 2014)	Avolio <i>et al.</i> , 1999) Bass <i>et al.</i> (2003) Howell and Avolio (1993) Judge and Piccolo (2004) Lowe <i>et al.</i> (1996)	<i>Neo-Charismatic Leadership Theories</i> (Existing Theory – Ranked #1)	Social learning theory Social cognitive theory Upper echelons theory	Transformational Authentic Servant Shared Ethical Strategic Abusive Spiritual	1 19 30 15 22 6 24 28

Theories – Leadership Approach Overlap					
Leadership Theories	Key References (Examples)	Overarching Leadership Theories (Dinh <i>et al.</i> , 2014)	Major Shared Theories (Zhu <i>et al.</i> , 2019)	Leadership Overlap Identified (Zhu <i>et al.</i> , 2019)	Rank (Dinh <i>et al.</i> , 2014)
				Trait-Theory Team Leadership Leader-Member Exchange	2 4 3
Transformational Leadership Established Theory Ranked#1 (Dinh <i>et al.</i> , 2014)	Bass (2008) Bass <i>et al.</i> (2003) Bono and Judge (2004) Judge and Piccolo (2004) Lowe <i>et al.</i> (1996) van Knippenberg and Sitkin (2013) Wang and Howell (2010) Wang <i>et al.</i> (2005) Wu <i>et al.</i> (2010)	<i>Neo-Charismatic Leadership Theories</i> (Existing Theory – Ranked #1)	Social cognitive theory Social exchange theory Social identity Theory Job characteristics theory Goal setting theory Trait activation Theory Upper echelons theory	Transactional Servant Shared Ethical Authentic Trait-theory Abusive Emergent Followership Implicit Identity-based Emotions & leadership Strategic Participative Charismatic Spiritual Entrepreneurial Leader-Member Exchange	17 30 15 22 19 2 24 4 11 12 7 10 6 15 7 28 37 3

Similarly, Zhu *et al.* (2019) analyzed 6,528 leadership works collected from the Web of Science database from 1990 to 2017 to visualize the landscape of leadership research and its evolution over time. The authors then provided a summary of the 200 influential landmark leadership journals based on major themes of leadership research (Zhu *et al.*, 2019). Journals, articles, or books with high total co-citation frequency are landmark works in the literature (Tsai and Wu, 2010). “A new form of document coupling, co-citation is defined as the frequency with which two documents are cited together” (Small, 1973). Zhu *et al.* (2019) concluded that leadership approaches and theories are interrelated and can overlap with other major overarching theories.

Recent global trends (refer to Appendix F for statistics on a recent Google Scholar search) and research support the relevance of these four leadership styles in the hybrid project leadership context. Therefore, this research recognized and proposed these four

styles as applicable and suitable leadership mix to better understand the current project leadership for hybrid teams in the banking industry.

2.8.1 Authentic Leadership Style (AL)

The concept of authenticity originated from Greek philosophy. Harter (2002) has provided excellent reviews of the origins and history of authenticity within the fields of philosophy and psychology. The humanistic psychologists Carl Rogers (1963) and Maslow (1971) focused attention on the development of fully functioning or self-actualized people, who are “in tune” with their basic nature, are unfettered by others’ expectations for them, and can make more sound personal choices. Remarkably, Maslow (1971) conceives of self-actualizing people as having strong ethical convictions. These ideas from humanistic psychology provide the foundation for Authentic leadership development (Avolio and Gardner, 2005).

“The concept of authentic leadership rose to prominence through its idealization as an inherently moral and universally desirable trait.” (Liu *et al.*, 2017). The theory of Authentic leadership emerged as a response to the greater scrutiny on integrity and transparency in business and public life, and the means of holding leaders accountable for their behaviors and actions (Alimo-Metcalfe, 2013; Walumbwa *et al.*, 2008). In early 2000, the unexpected ethical misconduct and corporate scandals attracted researchers like Avolio *et al.* (2007), Gardner *et al.* (2005), Avolio *et al.*, (2004), and Luthans and Avolio (2003) to introduce the development of a new value-based leadership called Authentic leadership. George (2003) popularized Authentic leadership, although the concept originated in 1960 to explain how an organization presents itself authentically through leadership. Amidst the ethical concerns, Authentic leadership promised a new breed of leaders who would, by being ‘true to themselves’, inspire confidence, optimism, and trust (George, 2003; Bass and Steidlmeier, 1999).

Authentic leadership can be summarized as a collection of four components such as; self-awareness, internalized moral perspectives, balanced processing, and relational transparency (Gardner *et al.*, 2005). Self-awareness refers to the leaders' awareness of their strengths and weaknesses, desires, and cognitions (Zamahani *et al.*, 2011). Internalized moral perspectives refer to the capability of a leader to recognize a moral dilemma and act under one's moral values and beliefs (Gardner *et al.*, 2005). Balanced processing of information refers to the quality of leaders being unbiased and gaining accurate information before reaching any decision (Gardner *et al.*, 2005). Authentic leaders can listen to those who disagree with their opinions and do not enforce their point of view on others (Gardner *et al.*, 2005). In relational transparency, the leaders show their true selves to their subordinates by openly sharing their feelings and motives, which helps with trust building, cooperation, and fostering teamwork (Gardner *et al.*, 2005).

A key differentiation of the AL from the other popular leadership styles is that Authentic leadership is more generic and forms the basis to incorporate other forms of positive leadership such as Transformational, Charismatic, Servant leadership, etc. (Gardner *et al.*, 2005; Avolio *et al.*, 2004). There are some similarities and differences between Authentic leadership and other leadership styles, especially Transformational and Ethical leadership styles (Podsakoff *et al.*, 1996). Both Authentic leadership and Transformational leadership motivate subordinates to go beyond their self-interest to achieve organizational goals (Podsakoff *et al.*, 1996). However, in contrast to Transformational leadership, Authentic leadership may or may not be charismatic, as George (2003) noted. Authentic leaders build enduring relationships, work hard, and lead with purpose, meaning, and values, but are not necessarily described as charismatic by others, which has been defined as the core component of Transformational leadership (Bass, 1985). Authentic leadership focuses on a leader's internal qualities, while

Transformational leadership concentrates on how leaders interact with their followers to pursue organizational goals (Bass, 1985). Similarly, Authentic leadership also has some theoretical and empirical overlaps with Ethical leadership (Brown and Treviño, 2006). Authentic leadership focuses on a leader's self-awareness of societal moral values; in contrast, Ethical leadership stresses a follower's awareness of ethical standards (Peus *et al.*, 2012).

Some influential authors in the leadership domain suggest that to lead effectively and foster a positive organizational climate, an individual needs to practice Authentic leadership (Gardner *et al.*, 2011; Avolio and Gardner, 2005; Avolio *et al.*, 2004). Supporters of Authentic leadership argue that it is particularly important to have authentic leaders in place when the organizational environment is complex and unpredictable (Avolio and Gardner, 2005; Avolio *et al.*, 2004; Luthans and Avolio, 2003) as they are the best placed to guide followers towards taking morally correct action during times of crisis (Avolio *et al.*, 2004). Although, Authentic leadership has become the focus of attention among scholars due to its positive and significant effects on employees as well as on organizational performance (Walumbwa *et al.*, 2011; Walumbwa *et al.*, 2008), many more empirical works remain to be explored (Avolio and Walumbwa, 2014; Gardner *et al.*, 2011).

2.8.2 Ethical Leadership Style (EL)

With the growing focus on value-based leadership and recent developments in the literature regarding the importance of ethics in the practice of leadership, some researchers have investigated Ethical leadership behaviors as a component of leadership, or have sought to explore Ethical leadership as a particular style of leadership (Kalshoven *et al.*, 2011). The model of Ethical leadership developed by Brown and Treviño and colleagues (Brown and Treviño, 2006; Brown *et al.*, 2005; Treviño *et al.*, 2003) suggests

that behavior is influenced by a combination of the influence of one's external environment and intrapersonal psychological factors. Brown *et al.* (2005) defined the concept of ethical leadership as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making”. The key characteristic of Ethical leadership is consistent with the principle on which Transformational and Servant leadership is based - that is, acting for the greater good (Burns, 1978) as it places the interest of followers over the self-interest of the leader and can be related to the concept of the leader as a servant (Greenleaf, 1970). Ethical leaders are honest, caring individuals who make decisions based on impartiality, follow ethical standards, and use appropriate rewards and punishments (a transactional approach) to reinforce them; their behavior is consistent with the views they champion (Brown and Treviño, 2006; Brown *et al.*, 2005; Treviño *et al.*, 2003).

Brown *et al.* (2005) stated that Ethical leadership is the demonstration of appropriate conduct through personal actions and interpersonal relationships, and the advocacy of such conduct to followers through two-way communications, reinforcement, and decision-making. Ethical leadership is the continuous practice of having a positive influence on decisions that will be the right and appropriate decision in any situation that impacts the greatest good (Littman and Littman, 2019). Ethical leadership is a critical form of leadership action that leads to higher levels of productivity, stronger service quality, better quality decision-making, a trusting environment, better communications, and increased flexibility from stakeholders (Littman and Littman, 2019). Ethical leaders indicate that they are trustworthy, fair, and worth competing with, and believe that process is more important than the product (Brown *et al.*, 2005).

Ethical leaders can have internal and external factors influencing them. Leaders' personal beliefs and values determine their character leading to their actions. The key values most important to ethical leaders are honesty, fairness, responsibility, and respect (Project Management Institute, 2013). The corporate culture is an important external factor for ethical leadership as a leader and members of an organization are strongly influenced by the corporate culture (Littman and Littman, 2019). The other external factors impacting ethical leaders are government mandates or policies that guide decisions within the confines of societal norms and legal regulations that specify the actions that are considered standard business behavior (Littman and Littman, 2019). Ethical leaders follow these guidelines in their daily personal and project actions (Littman and Littman, 2019). Aligning with the other authors, Kalshoven and Hartog (2009) and Kalshoven *et al.* (2011) found three distinct dimensions of the construct for Ethical leadership, namely; fairness - acting fairly and honestly; power sharing - listening to followers' opinions and allowing followers to be involved in decision-making relating to their work; and role clarification - communicating openly and clarifying responsibilities and roles. Supporting the importance of Ethical leadership, O'Brochta (2016) stated that project ethics compel the project team to align their actions consistently with their beliefs and are the key to executing projects successfully - ethics lead to trust, which leads to leadership, which, in turn, leads to project success. The PMs need to be consistently professional and ethical; Ethical leadership is an essential requirement to meet professional and project goals (Littman and Littman, 2019).

Research by Schaubroeck *et al.* (2012) found a positive influence of an ethical leader on project members' actions – the authors found limited support for trickle-down mechanisms of Ethical leadership but wider support for a multi-level model that takes into account how leaders embed shared understanding through their influence on ethical

units, which will in turn influence follower's ethical cognition and behavior. Banks *et al.* (2021) found that Ethical leadership in educational institutions is considered to be driven by values, including the firm belief in the dignity and rights of others instead of personalities or politics. Likewise, a study conducted by Schwepker and Dimitriou (2021) in the hospitality industry, reports that Ethical leadership reduces job stress and improves performance quality. The majority of research on Ethical leadership is focused on ethical outcomes, ethical decision-making, and counterproductive workplace behaviors (Bedi *et al.*, 2016), while there is other research suggesting that Ethical leadership improves employee performance (Dust *et al.*, 2018; Yang and Wei, 2017; Walumbwa *et al.*, 2011).

2.8.3 Transactional Leadership Style (TSL)

The Transactional style, as a management theory, was first described by Max Weber in 1947, where the leader sets targets and uses reward, deprivation, or punishment as a means of motivating the followers (Cherry, 2020). Transactional Leadership Theory was developed in the late 1970s and early 1980s (Cherry, 2020) when leadership theories had started diverging from the focus on the leaders, leadership context, and the followers toward practices that focused on the exchanges between the followers and leaders. Burns (1978) developed the model of Transactional leadership. Transactional leadership is when one person connects with others with the intention of an exchange of valued things that could be economic, political, or psychological (House and Shamir, 1993; Burns, 1978). Burns (1978) noted that both parties have a purpose in the exchange, but the relationship does not go beyond the exchange of valued benefits and accomplishment of agreed goals (Bass & Avolio, 1994). It also does not bind leader and follower together in a mutual and continuing pursuit of a higher purpose (Burns, 1978).

Bass (1985) extended the work of Burns and developed Transactional Leadership Theory, whereby Bass proposed that Transactional leadership is when the transaction or

exchange takes place among leaders, colleagues, and followers, based on the discussion between leaders and followers on the requirements and rewards that the followers will receive if they satisfy those conditions (Bass & Avolio, 1994). Followers fulfill the leader's requirement in exchange for praise, rewards, gratitude for merit, bonuses, promotions, and cooperation for collegiality (Bass and Avolio, 1997) or the avoidance of punishment for non-performance or lack of goal achievement (Bass *et al.*, 2003), not because they are devoted to their jobs. Transactional leadership provides incentives only when the employee demonstrates expected behaviors.

The Transactional Theory is based on interchange where leaders not only influence followers but are under the follower's influence as well (House and Shamir, 1993). Transactional leaders do not focus on an employee's personal development (Northouse, 2010), and instead are more concerned with the accomplishment of the goals. They focus on task clarification to offer rewards for positive performance and punishment for negative performance (Burns, 1978). The transactional leader exchanges benefit that satisfy follower needs and desires for follower-accomplished objectives or duties (Lussier & Achua, 2010).

Academics have researched the impact of Transactional leadership on work outcomes and team performance. In a study of 72 US Army platoons, Bass *et al.* (2003) found that Transactional leadership contributes to effective leadership and is essential to successful performance. By providing clarity of expectations, transactional leaders positively contribute to enhancing the platoon's performance (Bass *et al.*, 2003). Transactional leaders can also motivate followers by offering some form of satisfaction based on need such as pay or other rewards in return for work effort (Yukl, 2010). However, Yukl (2010) argued that the exchange process is not likely to produce passion and commitment among followers. This style can be efficient in achieving short-term

goals; on the other hand, it can also limit creativity, growth, and initiative (Hunt and Fitzgerald, 2018). This style may generally be used by the middle management level, like PMs. PMs practicing a TSL will usually be rigid in implementing rules, processes, and procedures. They will exercise reward and punishment so that the team is always disciplined in implementing the values it has created.

2.8.4 Transformational Leadership Style (TFL)

Transformational leadership was first described by James V. Downton, and later James MacGregor Burns further expanded it (Alimo-Metcalfe, 2013). Burns (1978) stressed that Transformational leadership is evidenced when one or more people engage with others in a way that leaders and followers raise one another to a higher level of motivation. Burns (1978) described Transformational leadership as a process rather than a specific behavior by suggesting that transformational leaders appeal to higher ideals and moral values and empower followers to produce fundamental change. Transformational leaders provide deeper levels of connection and promote higher levels of commitment, performance, and morality of both leader and follower (Burns, 1978). Bass (1985) later extended the work of Burns (1978). Bass and Avolio (1990) defined the concept of Transformational leadership as a form of leadership in which leaders have an idealized influence on followers, motivate them, provide a challenging task, enhance their creativity, and pay individual attention to the followers, accentuating the importance of appreciating subordinates.

The success of the TFL hinges on the leader's ability to inspire, motivate, and engage followers to attain organizational objectives (Yukl, 2010). The end goal of this leadership style is to bring positive change in followers and bring out the leadership abilities in followers (Wroblewski, 2019). With the support shown by the leaders through empowerment, motivation, and inspiration, employees are geared toward achieving

success. Transformational leaders can change things by crafting the vision and by influencing followers to commit to the vision and to focus on collective interest instead of self-interest (Lussier and Achua, 2007). By doing this, they can inspire followers to a higher level of performance (Yukl, 2010).

Transformational leadership aligns with working towards a greater good. Transformational leaders elevate the motivation and morality of both the follower and the leader (House and Shamir, 1993); they engage in interactions with followers based on common values, beliefs, and goals (House and Shamir, 1993) that enlighten leaders' practices and the capacity to lead change (Nawaz *et al.*, 2016). This influences performance, thereby facilitating the achievement of the goal. As per Bass (1985), a transformational leader, "attempts to induce followers to reorder their needs by transcending self-interests and strive for higher order needs". This theory conforms to Maslow's (1954) higher-order needs theory.

The literature on Transformational leadership indicates that both followers and leaders prioritize the team's interests over their own. The leader focuses on followers' needs and inputs to transform everyone into a leader by empowering and motivating them (House and Aditya, 1997). Transformational leaders are considered by their capability to identify the need for change, gain the agreement and commitment of others, create a vision that guides change, and embed the change (McGregor, 2000), making it more relevant to PMs. They are "visionary leaders who seek to appeal to their followers' better nature and move them toward higher and more universal needs and purposes" (McGregor, 2000).

The review of leadership literature shows that Transformational leadership has attracted the attention of many researchers (Northouse, 2010) and has been the most influential leadership theory of the last two decades (Judge and Piccolo, 2004). Bass

(1985) conducted research in military and industrial settings. Bass (1985) noted that while Transactional leadership can deliver satisfactory results in the short run, Transformational leadership can offer long-term effort, creativity, and productivity. Bass (1985) concluded that Transformational leadership can change and transform people to go beyond expectations. Camps and Rodríguez (2011) investigated the relationship between Transformational leadership behavior and employees' performance with a sample consisting of 795 faculty members from 75 university departments in Costa Rica. The study of Camps and Rodríguez (2011) revealed that Transformational leadership behavior increases workers' self-perceived employability, commitment, and performance. Those who work under transformational leaders have high self-perception of their employability and stay committed to their employers who have trusted and invested in them, leading to higher employee performance (Camps and Rodríguez, 2011).

Ling *et al.* (2008) carried out a study using a sample of 121 CEOs from 121 small-to-medium-sized firms to investigate the impact of CEO Transformational leadership on the performance of the firm and concluded that transformational CEOs had a significant positive effect on the performance of the small-to-medium-sized firms. Purvanova and Bono (2009) carried out an experimental study examining Transformational leadership in the context of traditional teams using face-to-face communication and virtual teams using computer-mediated communication. The results of the study of Purvanova and Bono (2009) suggest that Transformational leadership is more effective in teams that rely solely on computer-mediated communication. These studies support the positive impact of TFL on leadership outcomes and performance (Purvanova and Bono, 2009; Ling *et al.*, 2008)

The literature review on transformational leadership suggests that the TFL emphasizes change and transformation. PMs with this style tend to inspire teams

with a shared vision for future goals, where the team will usually be very proactive, enthusiastic, innovative, and highly committed, so close supervision is not required, making it more relevant to the hybrid teams.

2.9 Effectiveness of Project Manager's Leadership Styles

The leadership style of a leader is one of the main factors of an organization's effectiveness. Organizations at present are more concerned about understanding, developing, and improving their leadership (Ddiniyah *et al.*, 2014). Fiedler (1996) emphasizes the importance of leadership by arguing that the effectiveness of a leader is a major determinant of the success or failure of any group, or organization. There is a consensus that effective leadership is a success factor in organizations and that an appropriate leadership style can lead to better performance (Turner and Müller, 2005; Podsakoff *et al.*, 1990).

Effective leadership is a continuous process (Northouse, 2010) and is nonlinear. An effective leader applies appropriate leadership styles in leading the followers, understands the followers' strengths and weaknesses, and works on ways to improve the weaknesses and utilize the strengths. Followers take cues from the leader's actions, which influences their behavior, work conditions, and work environment (Podsakoff *et al.*, 1990). Effective leaders provide guidance and share knowledge with the employees to lead them to better performance and make them experts in maintaining quality (Iqbal and Anwar, 2015). Therefore, leadership that is capable of influencing employees' performance, and effectiveness (Turner and Müller, 2005) and promoting positive employee attitudes (Birasnav, 2014).

Organizations today have project teams that are less or more virtual (Nauman *et al.*, 2010), and the transition towards virtuality emphasizes the need to understand and enhance the effectiveness of project leadership, which refers to the success of the project

(Hyväri, 2006). Research exploring the dynamics of projects and the factors that lead to project management effectiveness are popular these days (Nauman *et al.*, 2010); and are in the areas of organizational structures, project management tools and methods, leadership competence, critical success, and failure factors and the characteristics of an effective PM (Zimmerer and Yasin, 1998; Belassi and Tukel, 1996). Organizations operating projects are now focusing on effective project leadership as an important success factor (Pinto and Slevin, 1988). Crawford (2003) suggests that project leadership is one of the key components of project management competence factors. Project leadership style affects project performance. Other research supports the idea that successful projects are led by individuals competent in technical and management domains and have leadership skills that are internally compatible with the motivation of the project team (Pinto and Slevin, 1988). Zimmerer and Yasin (1998) found that positive leadership contributed almost 76% to the success of projects while negative or poor leadership contributed 67% to the failure of projects. Project leaders need both, relationship and task-oriented leadership styles, to cope with the challenges within different phases of the project (Slevin and Pinto, 1991). Project leaders lead the teams toward achieving set goals within an agreed time and budget. Goals and tasks are the decisive test of achievement through people.

The effective PM needs to be able to apply as many different management, leadership, and communication styles as needed to bring the project to successful completion (Winkler *et al.*, 2022; Lee, 2021) by applying styles that best fit the needs of the projects. Effective PMs inspire the teams to proficiently accomplish project goals by making effective project management decisions throughout the project and contributing to a culture that promotes performance and success. The effective leadership of a hybrid

team ultimately is practicing fairness and inclusiveness with every team, irrespective of where they are working (Deligiannis, 2020).

Many researchers have investigated the leadership of executive management. However, leadership at other levels of management cannot be disregarded. Middle-level managers like PMs are tasked with leading different types of projects. Pinto and Slevin (1988) found that the competencies of the people involved in resolving extraordinary situations and unforeseen problems are an important factor for project success. Effective project leadership has been suggested as an important success factor in projects (Prabhakar, 2005), while Turner and Müller (2005) state that there is a need to investigate the impact of the individual PM's leadership style on the success of their projects. The project management literature has recently started focusing on project leadership styles and their impact on project outcomes (Müller and Turner, 2007a; Müller and Turner, 2007b).

Leadership style has been recognized as the driver of a PM's rate of success or failure (Cunningham *et al.*, 2015). Scholars and practitioners agree that leadership is a key factor for project success and crucial for creating environments that lead to higher levels of performance (Asree *et al.*, 2019), however, the form and style of leadership that produces the best results are still under debate (Müller and Turner, 2010b). Leadership styles, traits, and roles vary depending on the situation, making it hard for PMs to choose the best style (Clarke and Clarke, 2012; Turner and Müller, 2005). The cultural climate, diversity within the group, the industry in which the project operates, and team experience can influence the effectiveness of a particular leadership style (Müller and Turner, 2007a; Müller and Turner, 2007b).

PMs may exhibit different patterns of leadership behaviors as they search for optimal leadership styles that will lead their teams to project success (Jacques *et al.*,

2007). Leadership also affects team performance; Without proper leadership, team performance can suffer, leading to project failure (Sivasubramaniam *et al.*, 2002). The view on effective project leadership is also supported by Project Management Institute, (2021), which states that effective project leadership promotes project success and contributes to positive project outcomes. Effective project leaders adapt their styles to the situation, recognize differences in motivation among project team members, and demonstrate desired behavior in the areas of honesty, integrity, and ethical conduct (Project Management Institute, 2021).

There are a few studies that show a causal link between leadership and performance that is measured objectively, and for which the potentially confounding effect of contextual variables has been controlled (Jing and Avery, 2016; Keller, 2006). Of those studies that have examined the relationship between leadership and measures of effectiveness or performance, most have been cross-sectional rather than longitudinal; thus, causality cannot be inferred (Gardner *et al.*, 2010; Hunt, 2004; Judge and Piccolo, 2004; Lowe and Gardner, 2000).

Yang *et al.* (2011) designed a comprehensive research model on leadership, which helps to understand the relationship between leadership, teamwork, project success, and project type. A study by Jiang (2014) also found that leadership influences the performance of projects either in a direct way by leading to project success with corresponding competencies of PMs or in an indirect way by improving teamwork, which can help deliver successful projects. Nauman and Khan (2006) explored effective project management in the context of leadership behavior (concern for tasks and people) in more and less global projects; the results show that both leadership behaviors are equally important for any type of project. Project management success is enhanced by the positive guidance, influence, and integrity of a PM who sets high personal standards in

their actions and in their decisions that are followed by all others (Littman and Littman, 2019); which leads to trust and stronger decision-making, hence, improving the chance of project success.

2.10 Project Success

There is a wide disagreement in the project management literature on what constitutes project success (Blaskovics, 2014; Pinto and Slevin, 1988). While many research studies have been conducted on project success, this is still a complicated and multifaceted area to define (Ika, 2009). One of the reasons for this is the variety of perspectives while assessing the outcome of a project, which may result in the same project being both a resounding success and an absolute failure, depending on which stakeholder is evaluating the project's outcome (Lim and Mohamed, 1999). There were no accurate and consistent methodologies for measuring project success until the 1980s (Blaskovics, 2014) when researchers focused on the application of tools and techniques (Morris, 1997; Pinto and Slevin, 1988).

Brown *et al.* (2007) and de Wit (1988) tried to distinguish between project success (measured against the overall objectives of the project) and project management success (measured against the widespread and traditional measures of performance against cost, time, and quality). Others have referred to two components of project success (Turner, 2009; Morris and Hough, 1987) - project success criteria (the measures by which the success or failure of a project or business will be judged – dependent variables that measure success) and project success factors (those inputs to the management system that lead directly or indirectly to the success of the project or business – independent variables that make success more likely). Cleland and Kimball (1987) suggested that "project success is meaningful only if considered from two vantage points: the degree to which the project's technical performance objective was attained on

time and within budget; the contribution that the project made to the strategic mission of the enterprise". Ward (1995) opined that "scope and objectives are the guiding principles that direct the efforts of the project team and they will determine a project's success or failure". The literature review also shows general agreement with Geoghegan and Dulewicz (2008) and Baker *et al.* (1997), who deemed a project to be successful if it meets two criteria; the project is technically correct and performed in the manner intended, and the project meets the expectations of the clients leading to high level of stakeholder satisfaction in regards to project outcome.

Some studies stated that meeting the needs of stakeholders and their satisfaction determines project success (Müller and Turner, 2010a; Dvir *et al.*, 2006; Baker *et al.*, 1997). In the words of Baker *et al.* (1997) "instead of using time, cost and performance as measures for project success, perceived performance should be the measure." Other researchers suggest that project success can be measured by the quality of projects and products delivered, the effects of the project's final product (Baccarini, 1999), budget and timeline compliance, and the degree of customer and stakeholder satisfaction (Nyanama, 2022; Project Management Institute, 2013; Pinto and Slevin, 1988). Criteria for measuring project success must reflect different stakeholders' views (Stuckenbruck, 1986).

Bond-Barnard *et al.* (2018) have defined project success by combining all these definitions by stating that project success can be measured by 'things-related' measures such as the budget, quality, and schedule of the project deliverable, and 'people-related' criteria such as communication, trust, and collaboration, which determine the team morale and stakeholder satisfaction in the project. Prior studies have also shown that managing relationships is critical to project success (Acharya *et al.*, 2006).

To sum up the definition found in the literature, project success can be outlined in terms of efficiency and effectiveness (Ika, 2009). Efficiency is related to the evaluation of success through the lens of the traditional triangle of virtue or project triangle - time, cost/resource, and quality (Jugdev and Müller, 2005; Pinto and Slevin, 1988), which has been developed through a significant research effort in tools and techniques to achieve control over these three criteria (Belassi and Tukel, 1996). The project triangle is not a sufficient criterion to measure project success (Blaskovics, 2014), as it only measures the completion of the project from the efficiency point. That's where effectiveness comes into play. Due to the rapid changes in the environment, and the lack of stability, there is a need to analyze the project from the effectiveness side (Jugdev and Müller, 2005), which is a more complicated and subjective measure. Researchers have addressed this issue by incorporating measures of satisfaction, including client satisfaction, end-user satisfaction, and stakeholder satisfaction (Müller and Turner, 2010a; Dvir *et al.*, 2006; Lim and Mohamed, 1999; Baker *et al.*, 1997). These success criteria determine the assessment of project performance.

The PM is responsible for managing resources and successfully delivering projects (Project Management Institute, 2008). Thamhain (2004) opined that the working environment of the project team significantly impacts project success, therefore suggesting that the PM has a significant leadership role in fusing the team. There is a general agreement that the success of a project depends on PMs, however, there is a limited understanding of how PMs ensure project team success (Bhatti *et al.*, 2021) and project success. Researchers have highlighted the lack of research investigating how project teams are supported and how leader-team interactions affect project success (Pollack and Matous, 2019), and have not been able to pinpoint how and why a PM's leadership influences success in a project team context (Bhatti *et al.*, 2021).

The literature also suggests that the PM's leadership style and competence are seldom identified as critical success factors in projects (Müller and Turner, 2007b; Turner and Müller, 2005) leading to project success (Dvir *et al.*, 2006). Turner and Müller (2005) contemplated that PMs, as respondents in the study, probably neglect their role and their impact on project success, or the studies have not measured the impact of the PM and, hence, not recorded it, or the PM has no impact on the project success. However, this conclusion does not align with the general management, human resource management, or organizational behavior literature, which claims that the leadership style and competence of the manager have a direct and measurable impact on the performance of the organization (Turner and Müller, 2005; Morris, 1997; Morris and Hough, 1987), indicating leadership as a success factor.

Furthermore, Cooke-Davies (2002) identified project management as a success factor, not the PM. Some other studies have focused specifically on the PM. These studies considered the PM's contribution to project success rather than their leadership style. Jiang (2014) also supported this idea by stating that a plausible reason for the disappearance of leadership from the list of critical success factors could be that the project performance is influenced more by teamwork than direct management.

Despite claims about the influence of PM's leadership in successful projects, literature in this regard is scarce. Based on the model built by Yang *et al.* (2011), concluding leadership influences project success through teamwork, and the study by Dulewicz and Higgs (2004), which found that some of the fifteen leadership competencies are directly related to project success factors, Jiang (2014) studied leadership domain further and concluded that, in a certain project type, appropriate leadership can improve project success in two ways, through teamwork, and direct impact. There are many theories of leadership style and all of them claim that an

appropriate leadership style can influence project success (Jiang, 2014). Leaders or PMs are thus an important success factor in projects, leading to better team and project performance (Vaagaasar *et al.*, 2020; Dulewicz and Higgs, 2004; Belassi and Tukel, 1996). Hence, assigning the right PM is key to successful projects (Crawford, 2005). Dvir *et al.* (2006), in their exploratory study, concluded that project success can be achieved when a PM is properly matched to a project. Aligning with this view, Müller and Turner, (2007a) in their impressive research investigating the correlation between a PM's leadership style and project type found that the PM's leadership style can influence the project outcomes and project success, hence, supporting the idea that different project types require different leadership styles. Müller and Turner (2010a) and Müller and Turner (2007b) further explored this knowledge area to claim that PMs' leadership style has an effect on project success and that different leadership styles are suitable for different project types.

Most of the researchers have focused their inquiry on the effect of Transformational leadership (Avolio *et al.*, 1999) and Transactional leadership on project success (Ding *et al.*, 2017; Yang *et al.*, 2011). However, some authors are of the view that the theory and rationale regarding the impact of Transformational leadership on the project team aren't directly tied to the project team context; Transformational leadership is believed to facilitate enhanced motivation and commitment, which doesn't fully address the team-related challenges of project success (Bhatti *et al.*, 2021). Some studies (Yang *et al.*, 2011; Keegan and Den Hartog, 2004) found no clear relationship between a PM and project success but indicated that the PM needs more of a Transformational style than a Transactional leadership style.

While some recent literature does touch on value-based leadership, no significant study has been carried out investigating the effect of a PM's Ethical and Authentic

leadership style on hybrid project outcomes. Despite a wider belief that a PM's leadership style impacts project outcome and project performance, not many empirical studies have validated the model to assess the impacts (Yang *et al.*, 2013). Previously, Turner and Müller (2005) reviewed leadership and its use in project management studies, concluding that there is not enough research done to assess the impact of PM's leadership styles on project success. As documented by Turner and Müller (2005), the Project Management Institute has called for more research to investigate how PMs, through their leadership style, affect project success.

2.11 Leader-Member Exchange

Research on LMX suggests substantial links with many work outcomes. LMX is negatively related to turnover (Graen *et al.*, 1982) and turnover intentions (Vecchio and Gobdel, 1984), and positively related to satisfaction with supervision (Schriesheim and Gardiner, 1992), supervisory ratings of job performance (Graen *et al.*, 1982), and satisfaction with work (Vecchio and Gobdel, 1984). The LMX Theory has demonstrated that trust plays a pivotal role in building relationships between the PM and team members, with high-quality relationships motivating team members and guiding their attitudes and behaviors (Wood, 1989; Ames and Archer, 1988), hence influencing desired outcomes such as satisfaction, commitment, and performance (Murayama and Elliot, 2012; Costigan *et al.*, 2007; Dirks, 1999). The quality of this relationship has implications for employees' productivity and well-being in their jobs (Van Breukelen *et al.*, 2006).

The LMX theory has not escaped criticism. Some criticism includes the emphasis on in-groups and out-groups, which can lead to discrimination, with those followers fortunate enough to enjoy a positive relationship with their leader receiving certain privileges, although this has been contested (Scandura, 1999). Several studies on LMX

have concluded that the quality of the relationship between the PM and the team members leads to enhanced performance and successful projects, thus, demonstrating that trust plays a central role in relationships between the project leader and team members, influencing desired outcomes such as satisfaction, commitment, and performance (Dirks, 1999). Wiatr and Skowron-Mielnik (2023) emphasize the importance of relationships in the current environment. Research shows that the quality of the relationship people feel they have with their managers is the primary driver of engagement, and thus performance, in managing a hybrid team, is particularly important in building belonging and unity (Wiatr and Skowron-Mielnik, 2023). Contrary to this, Lee (2021) stated that the reality of the LMX model is that it often results in tension and conflict within the team and a negative and unproductive work environment, and hence, is not recommended for effective project management. Aligning with this view, Whipple (2010) also suggests that playing favorites can have a damaging effect on any group of people. Leaders who practice favoritism obstruct the opportunity for trust-building. Trust is critical to the success of hybrid projects (Whipple, 2010).

Leadership research was focused on the leader for a long time, thereby neglecting the impact of followers in the leadership process (Lussier & Achua, 2010), now the interaction-oriented approaches have started gaining popularity. Dyadic approaches look into the development of influence between leaders and followers. The time needed for interaction is crucial for the applicability of these approaches to project settings (Tyssen *et al.*, 2013). General dyadic approaches assume that leadership is developed over time (Graen and Uhl-Bien, 1995). Research on LMX Theory indicates that some level of quality of the relationships forms rather swiftly (Van Breukelen *et al.*, 2006) making LMX theory relevant to projects. Authors researching teams argue that leaders generally lack the time to establish high-quality relationships with all team members (Boies and

Howell, 2006). Adapting this to the projects, it seems crucial for PMs to tend to new team members to enable high-quality relationships (Van Breukelen *et al.*, 2006). Very few empirical studies have dealt with the emergence of such high-quality relationships (Van Breukelen *et al.*, 2006).

In the comprehensive analysis of leadership theories in temporary settings, Tyssen *et al.* (2013) provided an overview of the existing research on leadership and teams in project environments and identified several avenues for further research. One such research opportunity as per Tyssen *et al.* (2013) is the LMX approach that might contribute to effective leadership since research indicates that high-quality leader-member relationships develop swiftly. Tyssen *et al.* (2013) are of the view that there is an opportunity for further research to investigate the correlation between the LMX approach and various project leadership styles, to broaden and deepen the knowledge of leadership in projects in a hybrid environment.

There are researchers with the opinion that the most important part of leadership is not the leader, but the relationship between the leader and the followers (Kawaguchi *et al.*, 2021). LMX is important as high-quality LMX is positively associated with follower behaviors and attitudes in the workplace. Stich (2022) stated that higher virtuality increases the distance between managers and employees, coupled with numerous ways of communicating and differing times of availabilities due to flexibility offered pose further challenges. When implemented appropriately, the LMX approach can enhance leaders' effectiveness with hybrid teams. According to Van Breukelen *et al.* (2006) and Graen and Uhl-Bien (1995) the dyadic LMX theory is a relationship-based leadership theory that posits the idea that the strength of the exchange relationship that develops between leaders and their followers defines the effectiveness of leadership. Based on the research of Graen and Uhl-Bien (1995), effective leadership transpires when leaders and followers

develop and maintain high-quality exchange relationships. LMX can be Transactional and Transformational (Graen and Uhl-Bien, 1995).

In the hybrid environment, high-quality LMX is believed to reduce the problem of isolation and digital exhaustion among hybrid teams, hence supporting leadership effectiveness. High-quality leader-member relationships contribute to leadership effectiveness (Kawaguchi *et al.*, 2021) and team effectiveness through access to information and support across the organization (Druskat and Wheeler, 2003), characterized by mutual trust (Dulebohn *et al.*, 2012). Leaders can consciously use face-to-face interaction through the right tools to achieve positive LMX (Golden *et al.*, 2008). Jawadi *et al.* (2013) opined that relationship qualities like respect, mutuality, liking, and cooperation are the characteristics of high-quality exchanges that are expected to positively influence team outcomes. The findings from the study conducted by Jawadi *et al.* (2013) show that e-leaders, acting as mentors and facilitators positively influence exchanges between their team members.

2.12 Summary

This section provided an overview of the diverse theories developed in leadership literature. Defining leadership remains a complex task, as its definition continually evolves. The initial emphasis of leadership was on the leader's traits. It then shifted to their behaviors, and eventually to the importance of situational setting. It has been established leaders adjust their styles according to the needs of the specific circumstances as a single leadership style cannot ensure success in every situation.

Leadership styles have recently emerged as a significant focus of study in management. While it is known that there are several leadership styles, there is no prescribed literature on the best leadership style. A particular style is effective when it aligns with the environment, situation, and followers' needs. Additionally, it has been

observed that leadership styles are not systematically discussed collectively. While each of these styles has its own merits and demerits, some of the styles such as Transformational leadership and value-based leadership are getting more attention, since these styles seem to be more appropriate and relevant to the current business environment and talent pool (Kumar and Provodnikova, 2021). Leadership styles have also become more democratic (Biddle, 2005). While value-based leadership such as Authentic, Ethical, and Servant leadership styles were generally ignored previously, they have found popularity in academic literature since the 2000s (Zhu *et al.*, 2019; Dinh *et al.*, 2014).

Table 2.2 indicates the work of other authors (Zhu *et al.*, 2019; Hoch *et al.*, 2018; Avolio and Gardner, 2005) supporting the concept that these key leadership approaches overlap; and suggests multiple leadership approaches may be used holistically (Zhu *et al.*, 2019; Günzel-Jensen *et al.*, 2018) for effective project leadership. The literature review, hence, suggests the four leadership styles to be used in combination. Hence, this study proposed an overlapping framework of project leadership for hybrid teams in the banking industry that may incorporate aspects of all four leadership styles (AL, EL, TSL, and TFL) as shown in Figure 2.1.

The literature review suggests that leadership styles should be applied based on project types. Numerous factors drive the PMs to adapt their leadership styles accordingly. The emergence of new value-based leadership styles has created gaps in the literature on the influence of these emerging styles on project performance. The literature review also suggests that there have been many studies carried out regarding the LMX Theory and its impact on work outcomes, demonstrating that high-quality LMX results in effective leadership. Yet, the literature around the association of leadership styles and LMX is not widely researched. Effective project leadership would mean successful

project outcomes. Yet again, the study investigating the association of LMX and project performance is scarce, suggesting a need to research the relationship.

The review of the above-mentioned literature and the identified gaps led to the conceptualization of multi-dimensional Effective Project Leadership Styles for hybrid teams (Figure 2.1). This led to the design of the Project Leadership Framework (Figure 2.2) and Research Model (Figure 3.1), which will be covered in the next chapter of this research.

CHAPTER III: METHODOLOGY

3.1 Overview of the Research Problem

Due to the significant disruptions triggered by COVID-19, hybrid work has become the dominant trend, gaining academic attention. The leadership styles and competencies used by PMs have also changed. However, there is a gap in the literature studying this shift. The literature on leadership suggests that different leadership styles are appropriate in various situations and contexts. The project management literature also indicates that different leadership styles are suitable for different project types. However, the literature has overlooked the contribution of the PM's leadership style to project success (Pollack and Matous, 2019; Turner and Müller, 2005). Research has been carried out on the project leadership style and its impact on project performance (Jiang, 2014; Yang *et al.*, 2013; Müller and Turner, 2007a). Most of the research is limited to the public sector, manufacturing, construction industries, or not-for-profit organizations and generalized to a traditional work model (Yang *et al.*, 2013; Müller and Turner, 2007a).

The LMX between the PM and team members can also influence the project outcome. Maintaining a high-quality relationship between them can be way more challenging in the hybrid environment as the physical distance between the two parties increases (Stich, 2022; Axtell *et al.*, 2005). Yet, there is a gap in the literature interrogating the influence of LMX between the PM and project team and the project outcome.

The plethora of literature on leadership styles, projects, and hybrid work was reviewed as part of this study. It was found that very few studies have been previously conducted on project leadership styles in hybrid teams, especially focusing on the banking industry in Australia. Several research gaps could be detected across the project

leadership literature, especially in hybrid environments. Highly cited literature on virtual teams has differentiated traditional, hybrid, and fully virtual teams (Fiol and O'Connor, 2005; Griffith and Neale, 2001). However, most of the studies focused on the differences between traditional and fully virtual work (Golden and Eddleston, 2020; Kirkman and Mathieu, 2005; Griffith and Meader, 2004). However, there remains a significant gap in understanding effective leadership within hybrid project teams, despite growing interest in the topic. The research problem outlined indicated a need to conduct a study focusing on the PM's leadership styles to lead hybrid project teams in the banking industry in Australia.

3.2 Operationalization of Theoretical Constructs

During the literature review of leadership styles of PMs for hybrid teams, one consistent theme emerged that human behavior is complex to understand and predict. There isn't a simple way to pinpoint one effective project leadership style for hybrid teams as different styles may be effective for different situations even with the same team. The literature review indicated that project leadership must be adaptive (Lee, 2021). This aspect of leadership behavior has been acknowledged for a long time. Feger and Thomas (2012) indicated that there is no single leadership style that is fit for all projects and situations, due to the uniqueness of each project and specific environment. Müller and Turner (2010b) stated that certain leadership styles might be suitable for certain projects, while being less effective in others, by emphasizing the argument of Slevin and Pinto (1991), who called for adaptation of the PM's leadership style to the individual situations throughout a project. The context and situation can vary based on internal and external factors outside the PM's control.

Effective PMs are self-aware and understand their strengths and weaknesses and their preferred leadership styles. They are proactive enough to flex between different

leadership styles as the situation calls and adapt the one that suits the current project context, to successfully deliver the project outcome, while keeping the stakeholders satisfied. Wroblewski (2019) suggested that leadership style is a whirlpool of leaders' values, natural strengths and abilities, and beliefs and experiences, which can help the leaders align their vision, goals, and with the organization's mission and vision. Hence, a thorough understanding of different leadership styles will enable PMs to lead effectively.

The banking industry is regarded as quite turbulent, with many challenges and uncertainties, so a specific style of leadership is the need and not the choice (Berber *et al.*, 2019). Since leadership is influenced by the situation and context, it is expected that PMs in banks use leadership styles that will help them to motivate and lead their followers toward goals in a contemporary risky and unpredictable business environment. Hence, emerging hybrid project leadership concepts in the banking industry may mean a multi-dimensional leadership model with a mix of Authentic, Ethical, Transactional, and Transformational leadership styles at varying degrees, depending on the factors affecting the adoption of leadership styles (Figure 2.1). Each leadership style has strengths and suitability for different situations and contexts of projects and can have varying impacts on project performance (PP). Some leadership styles deemed irrelevant to the banking industry have not been covered in the research model (Figure 3.1), for example, Public Integrative Leadership, Spiritual Leadership, etc.

In considering project leadership styles, many styles can exist. The leadership in the hybrid world can be a combination of leadership styles, capturing the four overlapping leadership approaches. Adoption of Authentic, Ethical, Transactional, and Transformational leadership styles for a hybrid work model can help manage the pressure brought about by the highly regulated banking industry. This approach can drive the implementation of different types of projects successfully while also maintaining high-

quality exchange. Thus, project leadership in a hybrid work model needs to be a combination of leadership styles that lead to favorable project outcomes.

The findings of the literature review suggested that there are key knowledge gaps in the project leadership domain in the hybrid environment, especially in the banking sector. This study has addressed the research gaps by validating the multi-dimensional project leadership approach for hybrid teams in the banking industry. The study validated the effectiveness of the relevant leadership styles used by PMs through their impact on project performance (PP) in hybrid project teams. This research also examined the relationship between leadership styles, LMX, and PP, and interrogated whether LMX plays a mediating role between project leadership styles and PP. The Project Leadership Research Model (Figure 3.1) has been developed to examine the Project Leadership Style for Hybrid Teams (Figure 2.1) and the Project Leadership Framework (Figure 2.2) and validate the association of the independent variables (leadership styles of PMs) and dependent variables (LMX and PP).

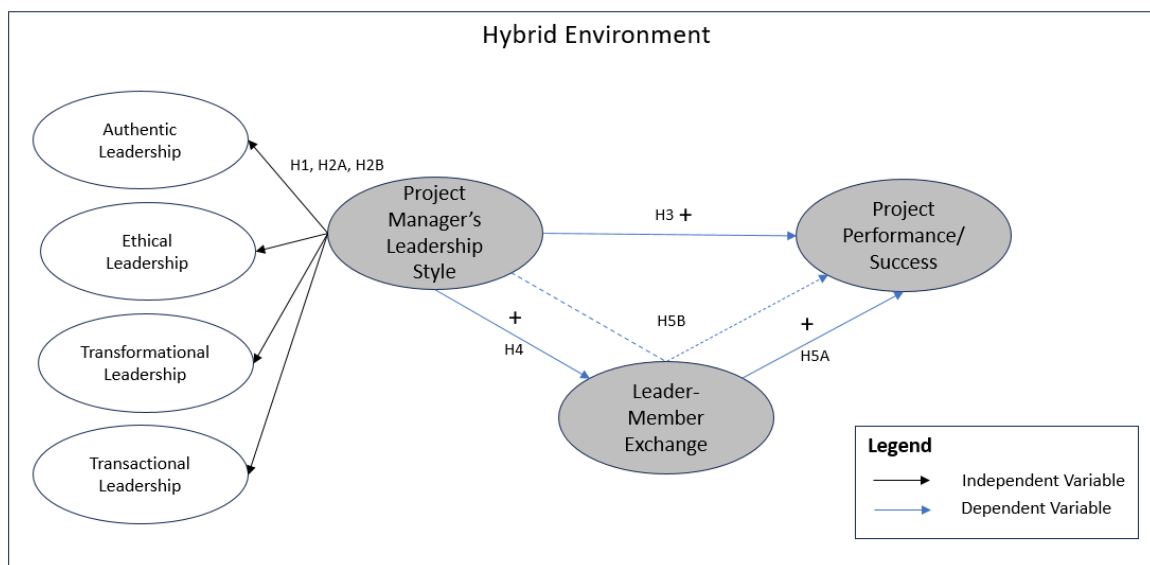


Figure 3.1
Project Leadership Research Model

Based on previous studies and existing research gaps, Figure 3.1 shows the theoretical research model on the relationship between a PM's leadership styles, PP, and LMX. This research encompasses the breadth of previous studies by identifying the relevant and effective leadership styles used by PMs to lead hybrid project teams in the banking industry. This is done by validating the Project Leadership Research Model by examining the influences of a PM's leadership style on project outcome and lastly by providing valuable results on the mediating role of LMX between PM's leadership styles and PP.

3.3 Research Purpose and Questions

The purpose of this research was to examine the effective leadership styles of the PMs, working in the hybrid work model, leading the projects toward successful outcomes. This research aimed to answer the following research questions (RQ), by testing the below-listed hypotheses (H_a : alternative hypothesis or H_o : null hypothesis), to address the problem statement and meet the research objectives:

RQ1 - Which leadership styles among Authentic, Ethical, Transactional, and Transformational, are the effective leadership styles for a Project Manager to lead hybrid project teams in the banking industry in Australia?

- H_o1 : Authentic, Ethical, Transactional, and Transformational leadership styles are not the effective project leadership styles used by PMs to lead hybrid project teams in the Australian banking industry.
- $H_a1.1$: Authentic leadership style is the effective project leadership style used by PMs to lead hybrid project teams in the Australian banking industry.
- $H_a1.2$: Ethical leadership style is the effective project leadership style used by PMs to lead hybrid project teams in the Australian banking industry.

- H_a1.3: Transactional leadership style is the effective project leadership style used by PMs to lead hybrid project teams in the Australian banking industry.
- H_a1.4: Transformational leadership style is the effective project leadership style used by PMs to lead hybrid project teams in the Australian banking industry.

RQ2 - Why is project leadership of hybrid teams in the banking industry in Australia a combination of multiple key leadership styles?

- H₀2A: PMs do not use a combination of Authentic, Ethical, Transactional, and Transformational leadership styles to lead hybrid project teams.
- H_a2A: PMs use a combination of Authentic, Ethical, Transactional, and Transformational leadership styles to lead hybrid project teams.
- H₀2B: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) do not change at varying degrees to lead hybrid project teams depending on project type, project team members' characteristics (gender, age, education, experience in projects), and degree of virtuality.
- H_a2B: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) change at varying degrees to lead hybrid project teams depending on project type, project team members' characteristics (gender, age, education, experience in projects), and degree of virtuality.

RQ3 - How does the Project Manager's leadership style impact project performance/success in a hybrid environment?

- H₀3: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) do not impact the project performance in a hybrid environment.
- H_a3.1: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) have a positive effect on the project performance in a hybrid environment.
- H_a3.2: PM's Authentic leadership style has a positive effect on the project performance in a hybrid environment.
- H_a3.3: PM's Ethical leadership style has a positive effect on the project performance in a hybrid environment.
- H_a3.4: PM's Transactional leadership style has a positive effect on the project performance in a hybrid environment.
- H_a3.5: PM's Transformational leadership style has a positive effect on the project performance in a hybrid environment.

RQ4 - How does the Project Manager's leadership style impact the quality of the relationship between the Project Manager and the project team members (LMX) in a hybrid environment?

- H₀4: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) do not impact the LMX relationship between the PM and hybrid project team members.
- H_a4.1: PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) have a positive effect on the LMX relationship between the PM and hybrid project team members.
- H_a4.2: PM's Authentic leadership style has a positive effect on the LMX relationship between the PM and hybrid project team members.

- H_a4.3: PM's Ethical leadership style has a positive effect on the LMX relationship between the PM and hybrid project team members.
- H_a4.4: PM's Transactional leadership style has a positive effect on the LMX relationship between the PM and hybrid project team members.
- H_a4.5: PM's Transformational leadership style has a positive effect on the LMX relationship between the PM and hybrid project team members.

RQ5 - How does the quality of the relationship between the Project Manager and hybrid project team members (LMX) impact the project performance?

- H₀5A: The LMX between the PM and the hybrid project team members does not impact the project performance.
- H_a5A: The LMX between the PM and the hybrid project team members positively affects project performance.
- H₀5B: LMX does not mediate the relationship between PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) and project performance.
- H_a5B: LMX mediates the relationship between PM's leadership styles (a combination of Authentic, Ethical, Transactional, and Transformational) and project performance.

3.4 Research Design

The review of existing literature regarding project leadership styles relevant to hybrid teams and their impact on project performance illustrated the need for additional research in that area, especially in the banking industry in Australia. Most of the research only focused on a single leadership style, leaving a gap in the academy of study; therefore, the use of a holistic approach to identify relevant project leadership styles is required. With the need for further investigation in this domain and the aforementioned

literature gaps, the scope of the study was proposed as stated in the Project Leadership Research Model (Figure 3.1). This research is designed to first identify the relevant leadership styles prevalent among the PMs in the banking industry. It then examined reasons and factors influencing the project leadership styles by examining hybrid team characteristics (through demographic variables), types of projects, and degree of virtuality. The effectiveness of the leadership styles was examined by their impact on PP. Lastly, the mediating role of LMX on the relationship between leadership styles and PP was examined.

According to Bhattacharjee (2012) research design “is a comprehensive plan for data collection in an empirical research project”, which is aimed at answering specific research questions or testing specific hypotheses. This section further elaborates on the research process to capture the research design. According to Saunder *et al.* (2019), research philosophy refers to a system of beliefs and assumptions about the development of knowledge. The research philosophy is a reflection of the researcher’s values (Saunder *et al.*, 2019). The philosophical choice made will impact the way research is conducted and how new knowledge is developed (Saunder *et al.*, 2019). The research design for this study can be illustrated in Figure 3.2 as the ‘Research Onion’ by Saunder *et al.* (2019). Positivism philosophy has been chosen for this research as this research relates to the philosophical stance of natural science and entails working with an observable social phenomenon to produce generalizations (Saunder *et al.*, 2019; Bhattacharjee, 2012).

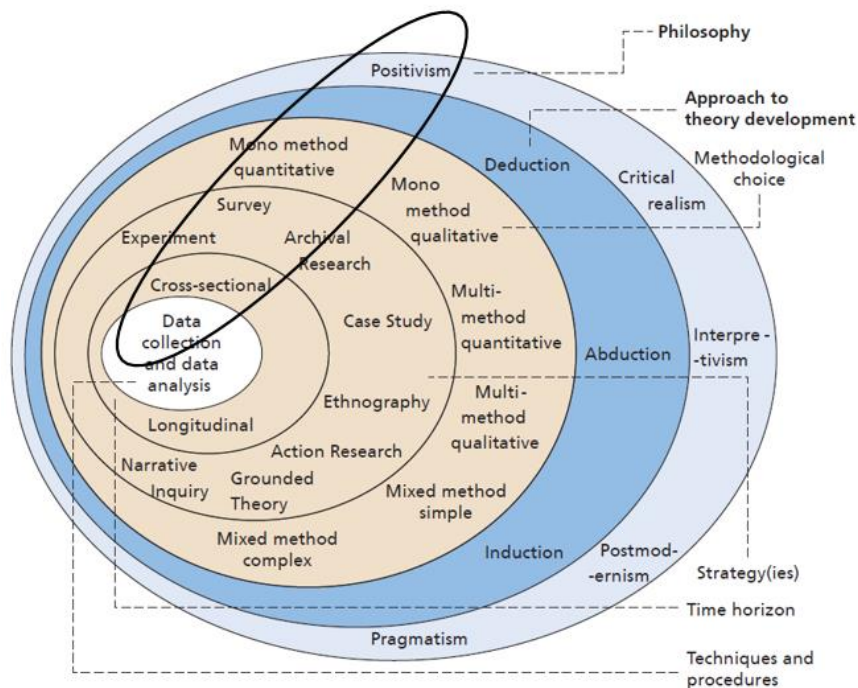


Figure 3.2
The Research Onion (Saunders et al., 2019)

A deductive explanatory research approach has been followed to analyze the relationship between the independent and dependent variables. This has been done by validating the Project Leadership Research Model (Figure 3.1) through new empirical data collection and analysis to test the formulated hypotheses based on the existing leadership theories, which shall produce generalizable results (Saunders *et al.*, 2019; Bhattacharjee, 2012). Using deductive explanatory research, existing leadership theories and emerging value-based leadership theories have been tested to identify causal factors and outcomes from the Project Leadership Research Model (Figure 3.1).

There are three widely used research methodologies namely qualitative, quantitative, and mixed methods, which is a combination of qualitative and quantitative (Bhattacharjee, 2012; Bryman, 2012; Creswell, 2003). Qualitative and quantitative methodologies have distinctive characteristics in the research philosophy, where the

epistemological and ontological position held by the authors is critical to consider when choosing a research methodology and strategy (Bhattacharjee, 2012; Bryman, 2012). Understanding the differences between both methodologies helped to select an appropriate research strategy. Qualitative emphasizes the meaning of words, while quantitative focuses on quantification in the collection and analysis of data, hence focusing on numerical values (Bhattacharjee, 2012; Bryman, 2012). The methodology also differs in the orientation of the role of theory in research.

In a quantitative method, the researcher applies a deductive approach, by deducing a hypothesis that is then subjected to empirical scrutiny to drive the data-gathering process (Bhattacharjee, 2012; Bryman, 2012). The findings will then reject or confirm the hypothesis, and become the basis for a revision of the theory (Bhattacharjee, 2012). In qualitative research, the researchers apply an inductive approach, by making observations detecting regularities, and then formulating a hypothesis that becomes the basis for theory generation (Bhattacharjee, 2012; Bryman, 2012). In qualitative research, the epistemological orientation is held by the interpretivist position, since the researcher needs to grasp the subjective meaning of social actors (Bhattacharjee, 2012; Bryman, 2012). Quantitative research is influenced by positivism, where the researcher applies methods of natural science to study the social business world (Bhattacharjee, 2012; Bryman, 2012). The aim of quantitative research is the prediction and testing of theory, whereas qualitative research concentrates on the exploration of meaning and generation of theory (Bhattacharjee, 2012).

This research aimed to test the existing leadership theories using the hypotheses formulated through the information gathered from theoretical and empirical studies during the literature review. The quantitative research methodology was used to collect empirical data on the PM's leadership styles, LMX, and PP in the banking industry in

Australia. The quantitative methodology used numerical data and statistical methods to support the deductive explanatory approach to validate the existing leadership theories and followed the positivism philosophy to test the formulated hypotheses. Quantitative research methodology was appropriate for this study as it involved a collection of numerical data and presented a view of the relationship between theory and research as a deductive and objectivist conception of social reality (Babbie, 2016; Bhattacharjee, 2012). Another advantage of using quantitative methods was the examination of variables, and the ability to generalize sample results to a larger population (Bhattacharjee, 2012).

The Project Leadership Research Model (Figure 3.1) facilitated empirical testing of theoretical relationship pathways extracted from the literature review. To test this model, data was collected using an online survey involving quantitative methodology grounded in positivist philosophy (Saunders *et al.*, 2019; Bhattacharjee, 2012). The online survey was cross-sectional, where independent and dependent variables were collected and measured at the same point in time through the same online survey questionnaire (Bhattacharjee, 2012) and provided results that can be generalized from the sample to the population.

Surveys are non-experimental designs that do not control or manipulate independent variables, but measure these variables and test their effects using statistical methods (Bhattacharjee, 2012). Surveys capture snapshots of practices, beliefs, or situations from a sample population through a standardized survey questionnaire in a systematic manner (Bhattacharjee, 2012). This method is best suited for research that has individual people as the unit of analysis (Bhattacharjee, 2012), hence aligned with this research objective. The survey strategy was chosen due to its strength with external validity, it can capture and control a large number of variables and it can study a problem

from multiple perspectives or using multiple theories (Bhattacharjee, 2012). Surveys are also appropriate for remotely collecting data about a population that is too large to observe directly (Bhattacharjee, 2012). Data obtained through surveys can be compared to other sources of information and can be used to identify correlations between variables.

Online surveys are a cost-effective method of obtaining research data with the ability to deliver self-administered surveys, are economical in terms of researcher time and effort (Bhattacharjee, 2012), and have a high speed of sending and receiving responses. The online surveys allow researchers to overcome the geographical boundaries that would otherwise limit sampling and, therefore, the applicability of research findings to larger populations (Bhattacharjee, 2012). Some respondents prefer online surveys due to their unobtrusive nature and the ability to respond at their convenience (Bhattacharjee, 2012). The surveys also have their share of disadvantages, which are discussed below in the research design limitation section (Section 3.10) of this chapter.

The descriptive correlational and inferential regression design is the most appropriate for this study as the design defines the variables and relationships that emerge between them (Bhattacharjee, 2012) as illustrated in the Project Leadership Research Model (Figure 3.1). This design is suitable as the collected data was on the perceptions, feelings, attitudes, beliefs, behavior, expectations, and other situations experienced by the participants. As the objective was to evaluate the relationship between independent and dependent variables, the non-experimental quantitative method of correlational design seemed appropriate for this study (Bhattacharjee, 2012). The online questionnaire survey was designed in a way to be able to filter the large sampling of data into relevant groups to facilitate data analysis.

The Exploratory Factor Analysis (EFA) was deemed appropriate to validate the multi-dimensionality of the project leadership construct for project teams in the hybrid work environment (Figure 2.1). EFA is a statistical technique used in research to uncover the underlying structure of a set of variables and constructs (Hair *et al.*, 2010). It is commonly used to identify the underlying relationships between measured variables and latent constructs (Hair *et al.*, 2010). EFA helps to explain the way different variables are grouped. It is used to understand complex constructs like leadership, which may consist of multiple dimensions (Hair *et al.*, 2010) as it can clarify the structure of leadership constructs by showing how various leadership styles and traits cluster together.

Analysis of Variance (ANOVA) was deemed appropriate for validating whether the project team member's characteristics, project type, and degree of virtuality impacted the PM's leadership styles. ANOVA is a statistical method used to test whether there are statistically significant differences between the means of three or more independent (unrelated) groups (Bhattacharjee, 2012). Descriptive means provide a summary of the central tendencies within each group, while ANOVA tests whether the differences between these group means are statistically significant. Means and ANOVA, combined, provide a comprehensive approach to understanding and analyzing differences across multiple groups.

3.5 Population and Sample

A population is defined as all people or items (unit of analysis e.g. person, group, organization, country, object, or any other entity) with the characteristics that one wishes to study (Bhattacharjee, 2012). Hence, people who have worked in a hybrid environment on projects in the Australian banking industry are the population. Sampling is the statistical process of selecting a subset of a population of interest, called a sample, to make observations and statistical interpretations about that population (Bhattacharjee,

2012). The results drawn from the sample of the population can be used for generalization of results (Bhattacharjee, 2012).

Non-probability sampling technique was used for this research, where “some units of the population have zero chance of selection or where the probability of selection cannot be accurately determined” (Bhattacharjee, 2012). The sample was selected based on certain non-random criteria; hence, this sampling technique did not allow for the estimation of sampling size and sampling errors (Bhattacharjee, 2012). Convenience sampling and snowball sampling techniques were used. Convenience sampling is a technique in which a sample is drawn from the part of the population that is readily available and convenient (Bhattacharjee, 2012). Snowball sampling was also deployed where a few respondents who matched the criteria for inclusion were identified and asked to recommend others they know who would also meet the selection criteria (Bhattacharjee, 2012).

There are several criticisms associated with this method of sampling as the likelihood of introducing bias and the selected respondents may not be a representation of the entire population (Bhattacharjee, 2012). However, the advantages like the speed of response, inexpensive, ease, and the respondents being readily available outweigh the disadvantages. This sampling technique was appropriate as the author works in the project domain in a bank in Australia and had access to the people meeting the selection criteria.

A sample of twenty cases per construct (Hair *et al.*, 2010) or an independent variable is recommended to test the model and hypothesis under standard and sophisticated statistical analysis. Hence, an adequate response from the sample has been collected to assess the significance of the Project Leadership Research Model at a significance level of at least $p < 0.05$ at a confidence interval of 95%.

The online survey was conducted on a sample of 242 prospective participants between 11 April 2024 and 31 May 2024, including a Pilot study for 1 week with 8 participants. After 1 individual reminder and 2 group reminders, 89 participants responded to the survey. The precise response rate is indeterminable since participants were asked to distribute the survey link within their networks to increase the sample size through a snowballing technique. However, no tracking mechanism was available to record how many surveys were forwarded to others. Hence, the approximate response rate was 37%. 6 participants did not meet the selection criteria. As such, only 83 valid responses were used for preliminary descriptive data analysis in this research, as shown in Table 3.1 and Table 3.2.

3.6 Participant Selection

The research selected sample people who had worked in a hybrid environment on projects in the Australian banking industry. PMs, hybrid project team members, and project stakeholders like Project Sponsors, Program Managers, Project Directors, leadership team, Product Owners, business stakeholders, and Project Management Office team members meeting the selection criteria qualified to participate in the survey. The selection criteria for participation in the survey were determined to be (a) participants must have been members or stakeholders of a project team working in the hybrid environment, (b) the projects must be in the banking industry in Australia, and (c) the project must have been completed.

3.7 Instrumentation

According to Bhattacharjee (2012) constructs are abstract concepts specified at a high level and are chosen to explain the phenomenon of interest. A researcher should specify exactly how the construct will be measured and the level of analysis at either individual, group, organizational level, etc (Bhattacharjee, 2012). The measurable

representations of constructs are called variables (Bhattacharjee, 2012). “Constructs and variables proceed along two planes of scientific research: Constructs are conceptualized at the theoretical plane, while variables are operationalized and measured at the empirical (observational) plane” (Bhattacharjee, 2012).

A questionnaire survey instrument containing 57 questions was used for this study, to measure dependent and independent variables such as a PM’s leadership style, LMX, and PP of hybrid projects in the banking industry in Australia. Respondents were instructed to base their survey responses on a recent project they were part of, which operated in a hybrid environment. For the chosen project, participants were instructed to assess the PM’s leadership style, the perceived quality of LMX between the PM and the hybrid team members, and the final project performance or outcome. The online survey had four distinct sections: (a) Project and personal demographic information including 10 items, (b) the Project Manager’s leadership style including 34 items, (c) LMX containing 7 items, and (d) project performance containing 6 items. The aggregated data collected through the survey was utilized to validate the Project Leadership Research Model (Figure 3.1) constructs through quantitative statistical methods.

A five-point Likert scale was used to quantify the data collected. Likert scale, designed by Rensis Likert, is a popular rating scale for measuring ordinal data in social science research (Bhattacharjee, 2012). This scale includes simple statements to which respondents can indicate the extent of agreement or disagreement on a five or seven-point scale ranging from “strongly disagree” to “strongly agree” (Bhattacharjee, 2012). This allows for more granularity, including whether respondents are neutral to the statement (Bhattacharjee, 2012). The section below explains each section of the survey used to validate the Project Leadership Research Model construct.

3.7.1 Project and Personal Demographic Information

This section of the survey requested participants to respond to 10 items relating to the projects that are used to respond to the survey and their personal demographic information. These variables are regarded as independent demographic variables. Three go/no-go (terminating) questions were asked initially to ensure the participants met the selection criteria before proceeding to the remaining 7 items on age group, years of experience in projects, their role, education, gender, number of days a week working remotely, and project type. These items in the questionnaire are characteristics that are considered appropriate to support this research. Nominal scales or categorical scales were used to measure data as these scales are used for variables that have mutually exclusive attributes (Bhattacharjee, 2012) by providing the respondents with multiple-choice items. The ten questions/items are available in Appendix D.

3.7.2 Leadership Styles

A PM's leadership styles are considered to be independent variables in this study and included 34 items to measure Authentic leadership (AL), Ethical leadership (EL), Transactional leadership (TSL), and Transformational leadership (TFL) styles. The measurement instruments used in the survey are based on previous research and hence assumed to be valid and reliable. Each item in this section of the survey instrument was measured on a five-point Likert scale ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree) to 5 (Strongly Agree).

Authentic Leadership Style (AL): Items from the Authentic Leadership Questionnaire (ALQ) (Walumbwa *et al.*, 2008) were chosen to measure the Authentic leadership style of a PM. The ALQ was created by Walumbwa *et al.* (2008) to explore and validate the assumptions of Authentic leadership (Northouse, 2016). ALQ is a 16-item instrument that measures four factors of AL namely self-awareness, internalized

moral perspective, balanced processing, and relational transparency (Northouse, 2016). Walumbwa *et al.* (2008) validated the dimensions of the instrument based on samples in China, Kenya, and the United States. Eight out of the sixteen items were used in this research based on their impact and relevance to the projects in the banking industry. The survey asked participants to rate eight items based on how strongly they believed the PM exhibited the leadership behavior described in each statement. The eight survey items are available in Appendix D.

Ethical Leadership Style (EL): Part of the 10-item instrument developed by Brown *et al.* (2005) was used to measure the Ethical leadership styles (EL) of a PM as the results have been validated and also used by other researchers in previous studies (e.g. Bhatti *et al.*, 2021; Walumbwa *et al.*, 2008). The instrument developed to measure EL captured the breadth of the Ethical leadership construct, was found to be consistent with the theoretical perspective, and demonstrated high reliability (Brown *et al.*, 2005). Eight out of ten items were used based on their impact and relevance to the projects in the banking industry. The survey asked participants to rate eight items based on how strongly they believed the PM exhibited the leadership behavior described in each statement. The eight survey items are available in Appendix D.

Transactional Leadership Style (TSL): The Transactional leadership construct was extracted from the Multifactor Leadership Questionnaire (MLQ) Form 5X-Short measurement items (Northouse, 2016). These items were initially part of Northouse's (2010) TSL measurement, which was sourced from the MLQ from Bass and Avolio (1995), and its reliability has been demonstrated across many disciplines. The Transactional leadership section of MLQ Form 5X-Short consists of eight items that measure two factors of Transactional leadership: contingent rewards, and management by exception-active (Northouse, 2016). All eight items were used in this research. The

survey asked participants to rate eight items based on how strongly they believe the PM demonstrated leadership behavior described in the statement. Due to copywriting conditions, the items administered in the survey cannot be further reproduced and published. The approved sample of TSL items is available in Appendix E.

Transformational Leadership Style (TFL): The Transformational leadership construct was extracted from the MLQ Form 5X-Short measurement items (Northouse, 2016). These items were initially part of Northouse's (2010) Transformational Leadership measurement, which was sourced from the MLQ from Bass and Avolio (1995) and its reliability has been demonstrated across many disciplines. MLQ is the most widely used measure of Transformational leadership (Northouse, 2016). The Transformational leadership section of MLQ Form 5X-Short consists of 20 items that measure five factors of Transformational leadership: idealized influence (attributes), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2016). Ten items out of twenty items were used in this research. The survey asked participants to rate ten items based on how strongly they believe the PM demonstrated leadership behavior described in the statement. Due to copywriting conditions, the items administered in the survey cannot be further reproduced and published. The approved sample of TFL items is available in Appendix E.

3.7.3 Leader-Member Exchange (LMX)

LMX is mostly measured using the LMX-7 instrument, which is a seven-item scale. LMX-7 has been developed and validated by Graen and Uhl-Bien (1995). LMX can also be measured via the LMX-MDM, an 11-item scale developed by Liden and Maslyn (1998). The LMX-7 and LMX-MDM are highly correlated with each other, suggesting that they measure the same construct, hence either could be used to measure

LMX (Dulebohn *et al.*, 2017). The LMX-7 (Northouse, 2016; Graen and Uhl-Bien, 1995) was used for this research. The LMX-7 is designed to measure three dimensions of leader-member relationships: respect, trust, and obligation, which together are the ingredients of strong partnerships (Northouse, 2016). The 7-item LMX instrument requested respondents to rate, on a scale of 1 to 5, how they perceived the quality of the relationship between a PM and a hybrid project team member. The seven survey items are available in Appendix D.

3.7.4 Project Performance (PP)

Part of the 9-item instrument developed by Belout and Gauvreau (2004) has been adapted to measure the project performance of a completed hybrid project as the results have been validated and also used by other researchers in previous studies (e.g. Bhatti *et al.*, 2021). This instrument captures all dimensions of the measure of project success from cost, quality, schedule, and scope to stakeholder and customer satisfaction, making it a well-rounded instrument. Only six out of the nine items have been used in this research based on their impact and relevance to the projects in the banking industry. The survey asked participants to rate six items based on how strongly they believed the completed project satisfied the statement. The six survey items are available in Appendix D.

3.8 Data Collection Procedures

The construct and variables for the questionnaire were identified through an extensive literature review. The questionnaire was initially pretested during an iterative Pilot study with eight personal connections of the author, who met the selection criteria and had extensive experience in projects in the Australian banking industry. This was done through a self-administered online Google Forms survey. The participants of the Pilot study were asked to evaluate the individual survey items on their readability, applicability to the banking industry in Australia, and ease of understanding. The Pilot

study, as expected, helped to uncover the ambiguity, lack of clarity, and biases in the question and statement wordings (Bhattacharjee, 2012). It has also contributed to testing the validity of the survey instruments within the Australian context and assessing the usefulness of the survey.

In response to the iterative Pilot feedback, a minor adjustment was made to the content of Item 9 of the 'Project and Personal Demographic Information' section to clarify the intent of the item in Pilot Day 1. The font of the survey request email was also changed from the default font of 'Times New Roman' to 'Arial' in Pilot Day 2 as this is the widely used font in Australia. The survey was then extended for data collection after the successful Pilot study between 11 April 2024 to 17 April 2024. As only a minor change was made to Item 9 in Pilot Day 1, all responses were used in the data analysis for this research.

The data for the research was gathered through a self-administered online survey. The survey was initiated via a link in the invitation, redirecting the participants to a Google Forms survey. Google Forms was considered appropriate for data collection as the survey was simple without complex branching logic and anyone with a link to the Google Forms survey could participate in the survey, hence widening the sample size and reach. The Google Forms survey is also mobile-device friendly, allowing respondents to complete the survey on a variety of device types (e.g., computers, tablets, smartphones, etc.).

An online Google Forms survey was shared with the potential participants through the author's social media network LinkedIn, emails, and personal connections. A standardized message and a cover letter/email including a hyperlink to the Google Forms survey instrument were prepared. The cover letter/email included a description of the research and its purpose and emphasized research is for academic purposes (DBA

research and dissertation). It also disclosed that the results will be reported on an aggregate basis. It reiterated that participation will be anonymous, confidential, and voluntary, and access to individual data will be limited to the researcher only. The cover letter/email also included a request for respondents to forward the message with the survey link to their connections who meet the selection criteria, to snowball the sample size. The survey link invited the participant to a 15-minute survey that was made available for 6 weeks until 31 May 2024.

3.9 Data Analysis

The primary numerical data collected through the Google Forms online survey was exported in Excel. The data was then coded numerically to prepare for importing into the statistical software IBM SPSS Statistics Version 29.0 (SPSS) as per the codebook prepared for this research. According to Bhattacharjee (2012) “a codebook is a comprehensive document containing a detailed description of each variable in a research study, items or measures for that variable,” the format of each item, the response scale for each item, and how to code each value into a numeric format.

The data was then imported to SPSS to analyze quantitatively. The data cleaning ensured that there were no missing data. Out of the total of 89 responses, 6 ineligible responses that did not meet the selection criteria were removed from the dataset. The frequencies and descriptive statistics were run to confirm that the data met the preconditions for both descriptive and inferential analysis. Data normality was measured using skewness and kurtosis. The rule of thumb for the acceptable range for normal distribution is skewness between +1.0 and -1.0 and kurtosis between +3.0 and -3.0. The descriptive analysis with the sample of 83 showed that several variables did not meet the criteria for normal distribution: AL, EL, TFL, LMX, and PP showed negative skewness outside the acceptable range with values ranging from -1.05 to -1.65. The kurtosis for AL

was also outside the acceptable range at 3.77. Only TSL appeared to fall within the acceptable range of skewness and kurtosis of normal distribution.

The process to identify outliers was conducted in SPSS. A visual boxplot (Figure 3.3) was used to identify the outliers. The z-test for outliers was then executed to statistically identify data points that were significantly different from the dataset. According to Kim (2013), as cited in Mishra *et al.* (2019), for a medium-sized sample between 50 to 300, a z-value within a range of +3.29 and -3.29 confirms the distribution of the sample to be normal. Case 30 was an outlier for two variables with a z-value of -4.37 for AL and -3.77 for EL. The other data points were within the acceptable range of z-value.

After trimming the outlier, the revised descriptive statistics showed improved skewness and kurtosis values of the dataset. The kurtosis of all data was within the acceptable range however, the skewness of EL and PP was outside the acceptable range at -1.40 and -1.20 respectively. As the z-values for the remaining 82 data points were within the acceptable range for normal distribution, the sample size was medium-sized, and the review of individual responses confirmed valid responses, further data trimming was considered unnecessary. Hair *et al.* (2010) also reasoned that data will be considered normal if skewness is between +/-2 and kurtosis is between +/-7. Hence the total valid sample size was finalized at 82.

A comparison of descriptive statistics in Table 3.1 shows that the trimming of an outlier improved the standard deviation. The means of the dependent and independent variables changed slightly ranging between 0.51% for TSL and 0.93% for EL, while the minimum for AL, EL, and TSL changed significantly. This justified the trimming of an outlier to normalize the data distribution to the acceptable range.

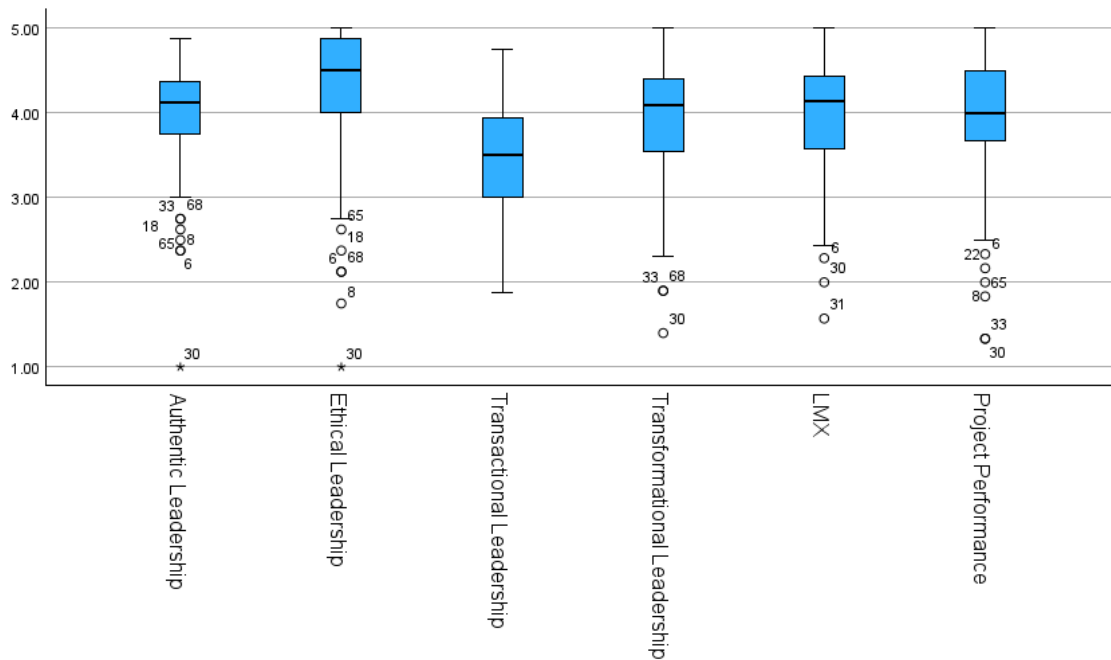


Figure 3.3
Boxplot for Dependent and Independent Variables

Table 3.1
Comparison of Descriptive Statistics

	Before trimming outlier					After trimming outlier					Variance
	N	Minimum	Maximum	Mean	Std. Deviation	N	Minimum	Maximum	Mean	Std. Deviation	
Authentic Leadership	83	1.00	4.88	3.96	0.68	82	2.38	4.88	4.00	0.60	0.91%
Ethical Leadership	83	1.00	5.00	4.23	0.86	82	1.75	5.00	4.27	0.78	0.93%
Transactional Leadership	83	1.88	4.75	3.43	0.72	82	1.88	4.75	3.45	0.70	0.51%
Transformational Leadership	83	1.40	5.00	3.92	0.77	82	1.90	5.00	3.95	0.72	0.78%
LMX	83	1.57	5.00	3.93	0.72	82	1.57	5.00	3.95	0.69	0.60%
Project Performance	83	1.33	5.00	3.96	0.83	82	1.33	5.00	3.99	0.78	0.81%

The respondents' profile is shown in Table 3.2. The sample consisted of 43 males (52%) and 39 females (48%). 31 Project Managers (38%), 42 project team members (51%), and 9 project stakeholders (11%) participated in the survey. The maximum number of responses were from respondents of the age group 41 to 50 years (44%), followed by the age group 31 to 40 years (27%) and 51 years and above (23%), while

there was no response from the age group under 21 years. This is consistent with the general demography and age groups of project team members in Australian banks. Banks in Australia value the experience of their employees in either financial institutions or professional services industries and/or professions like business analysis, change management, or project management for hiring. This makes it very unlikely for people under 21 years of age to get an opportunity to work on projects in banks.

The sample consisted of 43 respondents (52%) with a Bachelor's degree, 34% with a Master's degree, and 1 respondent with a Doctorate, while the rest of the participants had a High School degree (12%). 44% of the respondents had up to 10 years of experience in projects and 56% had 11 years or more experience in projects. 51 responses (62%) were based the strategic/ transformational projects, while 20 responses (24%) were based on operational projects and the remaining 13% were based on regulatory & compliance projects. The highest number of respondents (27 responses ~33%) worked remotely 3 days a week, while 17 respondents (21%) worked remotely 5 days a week, and 7 respondents (9%) worked remotely only 1 day a week.

Both descriptive analysis (statistically describing, aggregating, and presenting the associations between the constructs) and inferential analysis (statistical testing of hypotheses - theory testing) (Bhattacharjee, 2012) were then used on the 82 valid responses for data analysis. EFA was used to validate the multi-dimensionality of the project leadership construct. Correlation analysis was used to examine the relationship between the variables (Bhattacharjee, 2012) and regression analysis was used to test the significance and impact of the relationship (Bhattacharjee, 2012) outlined in the Project Leadership Research Model in Figure 3.1.

Table 3.2
Survey & Respondent's Profile

Characteristics	Category	Number of Respondents	Percentage of respondents	Cumulative percentage
Survey	Total survey request sent	242	100%	
	Total response	89	37%	
	Did not work in Banks in Australia	1	1%	1%
	Did not work in hybrid projects	2	2%	3%
	Project has not been completed	3	3%	7%
	Valid response	83	93%	100%
	Data cleaning - Outlier trimmed	1	1%	
Total valid response	82	99%	100%	
Respondents				
Gender	Male	43	52%	52%
	Female	39	48%	100%
Age	Under 21 years	0	0%	0%
	21 to 30 years	5	6%	6%
	31 to 40 years	22	27%	33%
	41 to 50 years	36	44%	77%
	51 years and over	19	23%	100%
Education	High School	10	12%	12%
	Bachelors	43	52%	65%
	Masters	28	34%	99%
	Doctorate	1	1%	100%
Experience in projects	Less than 1 year	1	1%	1%
	1 to 5 years	17	21%	22%
	6 to 10 years	18	22%	44%
	11 to 15 years	20	24%	68%
	Over 15 years	26	32%	100%
Type of Project the survey response is based on	Regulatory & Compliance	11	13%	13%
	Strategic/ Transformational	51	62%	76%
	Operational	20	24%	100%
Number of days working remotely	1 day	7	9%	9%
	2 days	13	16%	24%
	3 days	27	33%	57%
	4 days	18	22%	79%
	5 days	17	21%	100%
Role	Project Manager	31	38%	38%
	Project Team Member	42	51%	89%
	Project Stakeholder	9	11%	100%

Both correlation and regression analysis supported finding the linkages between the independent and dependent variables. Compare means with the Analysis of Variance (ANOVA) test was used to examine whether the project team member's characteristics, project type, and degree of virtuality have a significant impact on the PM's leadership

styles. These analyses helped test the hypotheses formulated and respond to the research questions by examining the relationship between the independent variables (leadership styles) and dependent variables (PP and LMX). The regression analysis and ANOVA testing, as suggested by Baron and Kenny (1986), were used to determine whether LMX has a mediating role in the relationship between PM's leadership style and PP. Given the nature of some hypotheses, multiple-linear regression was an appropriate data analysis technique as it enabled the simultaneous evaluation of multiple independent variables on a single dependent variable (Hair *et al.*, 2010).

Research Reliability and Validity

Any research based on the measurement of variables must be concerned with accuracy and dependability (Liphadzi *et al.*, 2015). According to Bryman (2012), the concern with reliability is how thoroughly the author explains the research procedures, which refers to the level of replicability if others using the same procedures would be able to reach the same finding. The reliability of the instrument characterizes the level of consistency and dependability (Bhattacharjee, 2012). The topic of the research was established during the research proposal stage and approved by the assigned academic mentor based on the established criteria from the Swiss School of Business and Management (SSBM) Geneva. The literature review conducted for the research, insights from various theoretical and empirical studies, and the author's experience in the project management and banking domains have supported the development of the Project Leadership Research Model (Figure 3.1).

Content validity is an assessment of the extent a set of scale items matches the relevant construct that it is trying to measure (Bhattacharjee, 2012). The survey questions have been extracted from previous research with reliable and validated results, hence ensuring content validity. The content, relevance to the Australian banking context, and

the time allowed to respond to the survey were also reviewed and modified with feedback from the Pilot study.

Construct validity of the variables in this research was tested through factor analysis in SPSS using principal components. Factor analysis with Promax rotation was used as the variables were correlated and needed oblique transformation. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy showed a value of 0.890, indicating that the sample size is good for factor analysis. Bartlett's Test of Sphericity showed a highly significant result with p-value <0.001 indicating that there are significant relationships among the variables. The items in the communalities table ranged between 0.553 and 0.867. The total variance explained table indicated that factors with Eigenvalues >1 explained 73% of the total variance. The pattern matrix showed the items measuring leadership construct with factor loading >0.3 mostly converged into the same factor, while a few of them had a factor loading >0.3 in more than one factor. The items measuring the project performance converged into a separate factor with high factor loading between 0.532 to 0.810 and with no overlap of any factor loading from the leadership constructs. Refer to Table 3.3 for further details. The factor analysis justified the multidimensionality of the leadership style constructs used in this research. The results aligned with the literature review findings regarding the overlapping of leadership approaches. As the items were adopted from reliable and valid established instruments used extensively in past research, none of the items were removed for data analysis purposes.

*Table 3.3
Results of Reliability and Validity Tests*

Construct	Instrument Used	No. of Items	Cronbach's Alpha	Factor Loading
Authentic Leadership	Adopted from ALQ developed by Walumbwa <i>et al.</i> (2008)	8	0.880	0.431 to 0.846
Ethical Leadership	Adopted from an instrument developed by Brown <i>et al.</i> (2005)	8	0.952	0.314 to 0.820
Transactional Leadership	Adopted from MLQ Form 5X-Short developed by Bass and Avolio (1995)	8	0.809	0.458 to 0.940
Transformational Leadership	Adopted from MLQ Form 5X-Short developed by Bass and Avolio (1995)	10	0.918	0.341 to 0.981
Leader-Member Exchange	Adopted from LMX-7 developed by Graen and Uhl-Bien (1995)	7	0.901	0.478 to 1.107
Project Performance	Adapted from instrument developed by Belout and Gauvreau (2004)	6	0.905	0.532 to 0.810

A reliability test was conducted in SPSS on the collected data received from the survey responses to ensure the reliability and consistency of the data for the study (Bhattacharjee, 2012). A reliability coefficient demonstrates whether the survey instrument design is accurate in measuring the variables being studied and if the items yield interpretable statements about individual differences (Bhattacharjee, 2012). To measure the internal reliability of the scale for this study, the reliability coefficient, Cronbach's Alpha, of above 0.70 was used as an acceptable reliability (Nunnally and Bernstein, 1994). Table 3.3 shows that Cronbach's Alpha for all constructs is above 0.809. According to Creswell (2003) when an instrument is modified or combined with the other instruments in a study, the original reliability and validity of the instrument may not hold for the new instrument. Hence, although the items were adopted from

established valid and reliable instruments, the reliability and validity tests were still conducted as part of the data analysis.

Research Ethics

Ethics is conformance to the standards of conduct of a given profession, which are defined at a disciplinary level through a professional code of conduct (Bhattacharjee, 2012). Ethical research involves protecting participants from harm that might result from activities and findings associated with the research project (Bhattacharjee, 2012; Creswell, 2003). The ethical review form was completed and approved before commencing the research ensuring ethical considerations are dealt with respectfully and truthfully. The author conformed to the conditions mentioned in the ethics review form at all times, ensuring that all ethical considerations were met.

Before proceeding with the online survey, information regarding the purpose of the survey, details of the research, and the contribution of the research were provided to the respondents to obtain informed consent (Bryman, 2012). The consent to participate was explicitly requested as part of the online survey (Appendix B). Proceeding with the survey by responding was considered voluntary willingness to participate.

The survey was anonymous and voluntary. Respondents were given the choice to participate in the research. They could withdraw at any time they wished to do so during the survey. Respondents were given assurance of confidentiality and that participants would remain anonymous throughout the research process. Respondent anonymity and confidentiality concerns were addressed at the onset. The survey administered in this study did not record sensitive personal information of the respondents like their names, addresses, date of birth, employers, etc., to adhere to confidentiality and also to mitigate the risk of potential conflict of interest.

Data collected and analyzed as part of the research are being stored securely for a reasonable period (e.g., 5-10 years) as cited in Creswell (2003). Conforming to the local Australian regulations regarding data, data collected and analyzed will be kept safely for seven years before securely being discarded so that it does not fall into the hands of other researchers who might appropriate it for other purposes (Creswell, 2003). Information on data storage security with confidentiality within statistical software and usage was provided to participants.

3.10 Research Design Limitations

A few assumptions were made while designing this research. The study assumed that PMs in the Australian banking industry would have the skills and knowledge to use a combination of AL, EL, TSL, and TFL to lead the hybrid project teams. The study also assumed that the survey instrument was relevant to the Australian context and that the respondents would have no problem interpreting the items in the survey to respond correctly. It was assumed that all respondents were honest with their answers. The other assumption was that the respondents submitted only one response for a particular completed project, while they could submit multiple responses for different completed projects. It was also assumed that the leadership styles represented by the sample can be generalized to the Australian banking industry. The other assumption was that the three project types categorized in this survey represented the true categories of projects in the Australian banking context.

With the primary data collected, it was assumed that all data received would be free of bias as much as possible, and useful in answering the research questions adequately. Some strategies to address the common biases had been considered during the research design. To minimize maturation bias (time effect bias), data on all independent and dependent variables were collected simultaneously (Hair *et al.*, 2010)

through a single 15-minute online survey. The literature-defined measurement constructs used in previous research were used to reduce measurement bias. All construct measures used the same 5-point Likert scale to improve consistency. Furthermore, previously established and validated reliable instruments were used to maintain construct validity, and an iterative Pilot study was also conducted to improve content validity.

The research had several limitations due to the research design. Non-probability sampling technique with convenience sampling and snowball sampling was used for this research. There are several limitations associated with this method of sampling as the likelihood of introducing bias and the selected respondents may not be a representation of the entire population (Bhattacharjee, 2012). This introduces limitations such as lack of generalizability, selection bias, non-randomness, and limited external validity. Some strategies were employed in this research to improve the validity of non-probability sampling. A larger sample size was used to mitigate the biases and provide a more accurate reflection of the population. A common rule of thumb is to have at least ten to fifteen responses per predictor or independent variable. A sample of twenty cases per construct (Hair *et al.*, 2010) or an independent variable was recommended to test the model and hypothesis under standard and sophisticated statistical analysis. Hence, an adequate response from the sample (N=82 to examine four independent leadership styles) was collected in this research. More than one non-probability sampling technique, namely convenience and snowball sampling, was used to capture a broader range of participants. Key sub-groups of the population, namely PMs, project team members, and project stakeholders, were included in the survey to make the sample more representative of the population. An iterative Pilot study was conducted to get feedback also on the sampling method and selection criteria to ensure the target population was effectively captured.

Surveys as a research instrument are subject to a large number of biases such as non-response bias, sampling bias, social desirability bias, and recall bias (Bhattacharjee, 2012). Surveys may be subject to respondent biases which may hurt internal validity (Bhattacharjee, 2012). This risk was mitigated to some extent by keeping the respondents' identities anonymous. The key challenge of administering online surveys can be the response rate. Factors affecting response rate can be time, email spam folders, self-selection, multiple submissions, or firewalls. These challenges were managed to some extent by providing clickable survey links in emails and through social media platforms to the author's connections, using inclusive language, using convenient and snowball sampling techniques, sending reminders, assuring participants about anonymity and confidentiality, about the usage of their responses, and increasing the survey duration. The research relied on data gathered on independent and dependent variables from the same source within one survey, using the same method that might have introduced a common method bias (Bhattacharjee, 2012). Similarly, the use of self-response might have introduced response bias, which might further hurt internal validity (Bhattacharjee, 2012).

Since the research was conducted as a requirement of an academic doctorate dissertation, limited time was allocated to gather data. The study was cross-sectional, hence causal relationships between the independent and dependent variables could not be inferred (Bhattacharjee, 2012). Since the survey participation was voluntary, the study excluded the views, opinions, and perceptions of the individuals who did not participate. This research used Australian banks to investigate the research hypotheses, which might limit the generalizability of the results as this only focused on a single industry in one geographic location. The other limitation was that some survey items considered project leadership as vertical leadership, however, shared and balanced leadership are gaining

popularity in the project domain in the Australian banking industry. The MLQ licensing cost for administering the survey was also a limitation, which restricted the author from collecting data from a larger sample size due to cost implications for the author with every additional response. MLQ licenses for administering 100 surveys were purchased by the author.

The research design was a quantitative methodology for statistical analysis, hence limiting the qualitative factors in explaining the associations between variables and the cause-and-effect relationship. Only four leadership styles were examined as part of this research based on the literature review findings and the author's experience within the banking industry. Finally, the research only focused on testing the hypothesized relationship between the variables through inferential statistics while discounting the influence of an infinite number of extraneous variables on the dependent variables (Bhattacharjee, 2012).

3.11 Conclusion

Appropriate research methodology selection is a crucial part of ensuring a reliable and valid study to address the research questions. This chapter provided information on the way research was designed and conducted. It justified the research design's appropriateness in answering the research questions. A deductive descriptive quantitative study with correlation analysis and inferential regression analysis with ANOVA test was followed to assess the impact of the independent variable (leadership style) on the dependent variables (PP and LMX) in hybrid project teams in the banking industry in Australia. The EFA and compare means with ANOVA tests were also used to validate the multi-dimensionality of the project leadership and factors impacting PM's leadership styles. This research design was deemed the most appropriate for this analysis as it defines the variables and relationships that transpire between them (Bhattacharjee, 2012),

as illustrated in the Project Leadership Research Model (Figure 3.1). The effectiveness of the PM's leadership style was measured and assessed through its impact on leadership outcomes like the quality of exchange relationship maintained and project performance. This was assessed through data collected from a sample meeting the defined selection criteria through the online survey. This research fell under the empirical study type as it dealt with real-life problems (Babbie, 2016) where new data were collected.

CHAPTER IV:

RESULTS

4.1 Research Question One

RQ1 - Which leadership styles among Authentic, Ethical, Transactional, and Transformational, are the effective leadership styles for a Project Manager to lead hybrid project teams in the banking industry in Australia?

The descriptive statistics and correlation analysis of various leadership styles and PP are presented in Table 4.1. The means and standard deviations were as follows: AL (M = 4.00, SD = 0.60), EL (M = 4.27, SD = 0.78), TSL (M = 3.45, SD = 0.70), TFL (M = 3.95, SD = 0.72), and PP (M = 3.99, SD = 0.78). The means of AL, EL, TFL, and PP were relatively close, ranging from 3.95 to 4.27, suggesting that the respondents rated these aspects similarly. TSL had a relatively lower mean (3.45) in comparison to the other variables. The standard deviations for all variables were relatively similar, ranging from 0.60 to 0.78. AL had the smallest standard deviation (0.60), indicating that the data points for AL are more tightly clustered around the mean in comparison to the other variables.

The leadership effectiveness was evaluated based on the impact of leadership styles on PP as per Section 2.9 of Chapter 2. The Pearson correlation coefficients between leadership styles and PP indicated significant positive correlations. There was a strong positive correlation between AL and PP ($r = .704$, $p < .001$), EL and PP ($r = .736$, $p < .001$), and TFL and PP ($r = .683$, $p < .001$), while a moderate positive correlation was observed between TSL and PP ($r = .379$, $p < .001$).

Table 4.1

Descriptive and Correlation Analysis for Leadership Effectiveness

Variable	Mean (M)	Std. Deviation (SD)	Pearson Correlations with Project Performance
Project Performance	3.99	0.78	1
Authentic Leadership	4	0.6	.704**
Ethical Leadership	4.27	0.78	.736**
Transactional Leadership	3.45	0.7	.379**
Transformational Leadership	3.95	0.72	.683**

**p < .001. Correlation is significant at the 0.01 level (2-tailed)

The results indicated that EL had the strongest positive correlation with PP, making it the most effective leadership style for PMs. AL and TFL showed strong positive correlations, suggesting they are highly effective leadership styles for PMs. TSL, while positively correlated, had a weaker relationship with PP compared to the other three leadership styles. The correlations also aligned with the ranking of means for the leadership styles observed in the sample, with PMs in the study showing the highest EL followed by AL, TFL, and TSL. The results support rejecting H_01 and accepting the alternative hypotheses $H_{a1.1}$, $H_{a1.2}$, $H_{a1.3}$, and $H_{a1.4}$ as the hypotheses testing showed that AL, EL, TSL, and TFL had significant ($p < .001$) positive relationship with PP, making these four leadership styles the effective leadership styles of PMs in the Australian banking industry to lead hybrid project teams. Refer to Section 3.3 of Chapter III for details of hypotheses.

4.2 Research Question Two

RQ2 - Why is project leadership of hybrid teams in the banking industry in Australia a combination of multiple key leadership styles?

4.2.1 Combination of Leadership Styles

Exploratory Factor Analysis (EFA) was conducted to test H_{a2A} using principal component analysis with Promax rotation as the variables were correlated and needed oblique transformation. The KMO measure of sampling adequacy showed a value of 0.904, indicating that the sample size was highly suitable for factor analysis. Bartlett's Test of Sphericity was highly significant ($\chi^2(561) = 2347.40, p < .001$) indicating that there are significant relationships among the variables and the correlations between items were sufficiently large for factor analysis. Communalities were high ranging between 0.584 and 0.857, which indicated that a substantial amount of variance in each item is explained by the factors.

Table 4.2
Factor Analysis – Pattern Matrix for Leadership Styles

	Component					
	1	2	3	4	5	6
AL1	0.763					
AL2	0.899					
AL3		0.745				
AL4		0.817				
AL5	0.379	0.511				
AL6					0.967	
AL7					0.3	-0.525
AL8	0.92					
EL1		0.754				
EL2	0.425	0.32				
EL3	0.447	0.329				
EL4	0.73					
EL5	0.902					
EL6	0.879					
EL7	0.811					
EL8	0.732					
TSL1	0.942					
TSL2	0.507				0.43	
TSL3	0.658				0.425	
TSL4	0.874					

TSL5			0.908			
TSL6			0.903			
TSL7			0.792	0.313		
TSL8			0.78			
TFL1	0.474			0.375		
TFL2				0.335		0.9
TFL3	0.534	0.32			0.303	
TFL4	0.648					
TFL5				0.96		
TFL6				0.787		
TFL7	0.32		0.369			
TFL8	0.544			0.351		
TFL9	0.794					
TFL10	0.944					
Extraction Method: Principal Component Analysis.						
Rotation Method: Promax with Kaiser Normalization.						

The principal component analysis revealed six factors with Eigenvalues > 1 and explained 72.24% of the total variance. The pattern matrix in Table 4.2 showed the items measuring leadership construct with factor loading > 0.3 loaded highly on Component 1, while a few of the items from each leadership style loaded highly in other components. The factor loading indicated an overlap of items from various leadership styles into a particular component. The means for each leadership style studied, as presented in Table 4.1, also indicated a high value for AL, EL, TSL, and TFL in the sample. The descriptive statistics and factor analysis hence supported rejecting the null hypothesis H₀2A and indicated that PMs use a combination of AL, EL, TSL, and TFL to lead hybrid project teams in the Australian banking industry. Refer to Section 3.3 of Chapter III for details of hypotheses.

4.2.2 Factors Impacting Leadership Styles

Means of four leadership styles studied with ANOVA were used to examine the impact of project team members' characteristics (gender, age, education, experience in projects), project type, and degree of virtuality on the leadership styles of PMs.

Gender and Leadership Styles

Descriptive statistics were calculated for each leadership style by gender. The means and standard deviations are presented in Table 4.3. On average, females scored slightly higher than males on AL (4.04 vs. 3.97), EL (4.36 vs. 4.19), and TFL (4.03 vs. 3.88), while males scored higher on TSL (3.53 vs. 3.35). A one-way ANOVA was conducted to compare the effect of gender on AL, EL, TSL, and TFL. The results of the ANOVA indicated that there were no significant differences between male and female participants on any of the leadership styles. The effect sizes were small for all comparisons, indicating minimal practical significance.

Table 4.3
Gender and Leadership Styles - Means and ANOVA

Leadership Style	Gender	N	Mean	Std. Deviation		
Authentic Leadership	Male	43	3.97	0.64		
	Female	39	4.04	0.54		
Ethical Leadership	Male	43	4.19	0.79		
	Female	39	4.36	0.77		
Transactional Leadership	Male	43	3.53	0.71		
	Female	39	3.35	0.69		
Transformational Leadership	Male	43	3.88	0.72		
	Female	39	4.03	0.72		
ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Authentic Leadership * Gender	Between Groups (Combined)	.110	1	.110	.307	.581
	Within Groups	28.640	80	.358		
	Total	28.750	81			
Ethical Leadership * Gender	Between Groups (Combined)	.614	1	.614	.999	.321
	Within Groups	49.161	80	.615		
	Total	49.775	81			
	Between Groups (Combined)	.658	1	.658	1.331	.252
	Within Groups	39.561	80	.495		

Transactional Leadership * Gender	Total	40.220	81			
Transformational Leadership * Gender	Between Groups (Combined)	.469	1	.469	.913	.342
	Within Groups	41.116	80	.514		
	Total	41.585	81			

Age Group and Leadership Styles

Descriptive statistics were calculated for each leadership style by age group. The means and standard deviations are presented in Table 4.4. Participants aged 21 to 30 years generally scored higher on AL (M = 4.30) and EL (M = 4.55) compared to other age groups. A one-way ANOVA was conducted to compare the effect of age group on AL, EL, TSL, and TFL. The results of the ANOVA indicated that there were no significant differences among the different age groups across any of the leadership styles. The results confirmed that age does not have a significant effect on leadership styles. The effect sizes were small for all comparisons, indicating minimal practical significance.

Table 4.4
Age Group and Leadership Styles - Means and ANOVA

Leadership Style	Age Group	N	Mean	Std. Deviation
Authentic Leadership	21 to 30 years	5	4.3	0.29
	31 to 40 years	22	3.92	0.61
	41 to 50 years	36	3.99	0.65
	51 years and over	19	4.03	0.54
Ethical Leadership	21 to 30 years	5	4.55	0.47
	31 to 40 years	22	4.16	0.82
	41 to 50 years	36	4.28	0.85
	51 years and over	19	4.31	0.69
Transactional Leadership	21 to 30 years	5	3.6	0.71
	31 to 40 years	22	3.57	0.68
	41 to 50 years	36	3.42	0.71
	51 years and over	19	3.3	0.75
Transformational Leadership	21 to 30 years	5	4.26	0.7
	31 to 40 years	22	3.87	0.77

	41 to 50 years	36	3.98	0.69		
	51 years and over	19	3.89	0.73		
ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Authentic Leadership *	Between Groups (Combined)	.604	3	.201	.558	.644
	Within Groups	28.146	78	.361		
	Total	28.750	81			
Ethical Leadership *	Between Groups (Combined)	.667	3	.222	.353	.787
	Within Groups	49.108	78	.630		
	Total	49.775	81			
Transactional Leadership *	Between Groups (Combined)	.887	3	.296	.586	.626
	Within Groups	39.333	78	.504		
	Total	40.220	81			
Transformational Leadership *	Between Groups (Combined)	.726	3	.242	.462	.710
	Within Groups	40.859	78	.524		
	Total	41.585	81			

Education Level and Leadership Styles

Descriptive statistics were calculated for each leadership style by education level. The means and standard deviations are presented in Table 4.5. Participants with a Bachelor's degree generally scored higher on AL ($M = 4.05$) and EL ($M = 4.26$) compared to other education levels. A one-way ANOVA was conducted to compare the effect of education level on AL, EL, TSL, and TFL. The results of the ANOVA indicated that there were no significant differences in leadership styles among the different education levels across any of the leadership styles. The results confirmed that education level does not have a significant effect on leadership styles. The effect sizes were small for all comparisons, indicating minimal practical significance.

Table 4.5

Education Level and Leadership Styles - Means and ANOVA

Leadership Style	Education Level	N	Mean	Std. Deviation		
Authentic Leadership	High School	10	3.8	0.72		
	Bachelors	43	4.05	0.62		
	Masters	28	4.03	0.48		
	Doctorate	1	3	-		
Ethical Leadership	High School	10	4.09	1.17		
	Bachelors	43	4.26	0.79		
	Masters	28	4.38	0.62		
	Doctorate	1	3.75	-		
Transactional Leadership	High School	10	3.61	0.73		
	Bachelors	43	3.52	0.71		
	Masters	28	3.31	0.67		
	Doctorate	1	2.38	-		
Transformational Leadership	High School	10	3.88	0.93		
	Bachelors	43	3.94	0.78		
	Masters	28	4	0.54		
	Doctorate	1	3.4	-		
ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Authentic Leadership * Education	Between Groups (Combined)	1.538	3	.513	1.469	.229
	Within Groups	27.212	78	.349		
	Total	28.750	81			
Ethical Leadership * Education	Between Groups (Combined)	.947	3	.316	.505	.680
	Within Groups	48.828	78	.626		
	Total	49.775	81			
Transactional Leadership * Education	Between Groups (Combined)	2.161	3	.720	1.476	.227
	Within Groups	38.059	78	.488		
	Total	40.220	81			
Transformational Leadership * Education	Between Groups (Combined)	.435	3	.145	.275	.844
	Within Groups	41.150	78	.528		
	Total	41.585	81			

Experience in Projects and Leadership Styles

Descriptive statistics were calculated for each leadership style by participant's experience working on projects. The means and standard deviations are presented in Table 4.6. Participants with 1 to 5 years of experience generally scored higher on EL ($M = 4.40$) and TFL ($M = 4.27$) compared to other experience levels. A one-way ANOVA was conducted to compare the effect of experience on AL, EL, TSL, and TFL. The ANOVA results indicated that there were significant differences in EL scores among the different experience levels with moderate effect size ($F(4, 77) = 3.14, p = .019, \eta^2 = .140$). There were no significant differences in TSL scores, while AL and TFL scores were approaching significance with $p \sim 0.05$. The effect sizes for AL and TFL were also moderate, indicating potential practical significance, even though the p-values were slightly above the significance threshold. TSL, however, did not show significant differences across experience levels.

Table 4.6
Experience in Projects and Leadership Styles - Means and ANOVA

Leadership Style	Experience Level	N	Mean	Std. Deviation
Authentic Leadership	Less than 1 year	1	2.38	-
	1 to 5 years	17	4.13	0.51
	6 to 10 years	18	3.9	0.66
	11 to 15 years	20	4.05	0.49
	Over 15 years	26	4.01	0.61
Ethical Leadership	Less than 1 year	1	1.75	-
	1 to 5 years	17	4.4	0.68
	6 to 10 years	18	4.16	0.88
	11 to 15 years	20	4.31	0.69
	Over 15 years	26	4.33	0.73
Transactional Leadership	Less than 1 year	1	3	-
	1 to 5 years	17	3.63	0.74
	6 to 10 years	18	3.42	0.68
	11 to 15 years	20	3.32	0.62

	Over 15 years	26	3.46	0.77		
Transformational Leadership	Less than 1 year	1	2.5	-		
	1 to 5 years	17	4.27	0.52		
	6 to 10 years	18	3.73	0.76		
	11 to 15 years	20	3.97	0.72		
	Over 15 years	26	3.93	0.72		
ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Authentic Leadership * Experience working on projects	Between Groups (Combined)	3.186	4	.797	2.399	.057
	Within Groups	25.564	77	.332		
	Total	28.750	81			
Ethical Leadership * Experience working on projects	Between Groups (Combined)	6.979	4	1.745	3.139	.019
	Within Groups	42.796	77	.556		
	Total	49.775	81			
Transactional Leadership * Experience working on projects	Between Groups (Combined)	1.125	4	.281	.554	.697
	Within Groups	39.095	77	.508		
	Total	40.220	81			
Transformational Leadership * Experience working on projects	Between Groups (Combined)	4.716	4	1.179	2.463	.052
	Within Groups	36.868	77	.479		
	Total	41.585	81			

Type of Project and Leadership Styles

Descriptive statistics were calculated for each leadership style by type of project. The means and standard deviations are presented in Table 4.7. Participants involved in Operational projects generally scored higher on all leadership styles compared to those involved in Regulatory & Compliance and Strategic/Transformational projects. A one-way ANOVA was conducted to compare the effect of the type of projects on AL, EL, TSL, and TFL. The ANOVA results indicated that there were no significant differences in leadership style scores among different types of projects. There was an approaching

significance for TFL, indicating a potential difference among project types, however, the p-value was still above 0.05. These results suggested that the type of project does not significantly affect AL, EL, or TSL scores. However, the type of project may have a moderate effect on TFL scores, as indicated by the approaching significance and moderate effect size ($F(2, 79) = 2.83, p = .065, \eta^2 = .067$).

Table 4.7
Type of Projects and Leadership Styles - Means and ANOVA

Leadership Style	Project Type	N	Mean	Std. Deviation			
Authentic Leadership	Regulatory & Compliance	11	3.97	0.42			
	Strategic/Transformational	51	3.97	0.6			
	Operational	20	4.09	0.68			
Ethical Leadership	Regulatory & Compliance	11	4.31	0.73			
	Strategic/Transformational	51	4.23	0.76			
	Operational	20	4.35	0.9			
Transactional Leadership	Regulatory & Compliance	11	3.44	0.45			
	Strategic/Transformational	51	3.4	0.75			
	Operational	20	3.57	0.72			
Transformational Leadership	Regulatory & Compliance	11	3.91	0.62			
	Strategic/Transformational	51	3.83	0.74			
	Operational	20	4.27	0.64			
ANOVA Table							
		Sum of Squares	df	Mean Square	F	Sig.	
Authentic Leadership *	Between Groups (Combined)	.233	2	.116	.322	.725	
	Within Groups	28.517	79	.361			
	Total	28.750	81				
Ethical Leadership *	Between Groups (Combined)	.213	2	.107	.170	.844	
	Within Groups	49.562	79	.627			
	Total	49.775	81				
Transactional Leadership *	Between Groups (Combined)	.412	2	.206	.408	.666	
	Within Groups	39.808	79	.504			
	Total	40.220	81				
		Between Groups (Combined)	2.784	2	1.392	2.834	.065

Transformational Leadership *	Within Groups	38.801	79	.491		
Type of Project	Total	41.585	81			

Degree of Virtuality and Leadership Styles

Descriptive statistics were calculated for each leadership style by participant's remote working days per week. The means and standard deviations are presented in Table 4.8. Participants working 4 days remotely generally scored higher on AL and EL compared to other groups. A one-way ANOVA was conducted to examine the effect of the number of days working remotely on AL, EL, TSL, and TFL. The ANOVA results indicated that there were no significant differences in leadership style scores among different numbers of days working remotely. These results suggested that the number of days working remotely does not significantly affect scores for AL, EL, TSL, or TFL. All eta squared (η^2) values indicated small or very small effect sizes.

*Table 4.8
Degree of Virtuality and Leadership Styles - Means and ANOVA*

Leadership Style	Days Working Remotely	N	Mean	Std. Deviation
Authentic Leadership	1 day	7	3.96	0.8
	2 days	13	3.85	0.55
	3 days	27	4	0.59
	4 days	18	4.15	0.56
	5 days	17	3.97	0.62
Ethical Leadership	1 day	7	4.29	0.96
	2 days	13	4.14	0.84
	3 days	27	4.23	0.77
	4 days	18	4.43	0.7
	5 days	17	4.26	0.84
Transactional Leadership	1 day	7	3.79	0.47
	2 days	13	3.46	0.95
	3 days	27	3.49	0.58
	4 days	18	3.36	0.64

	5 days	17	3.32	0.84		
Transformational Leadership	1 day	7	4.11	0.88		
	2 days	13	3.93	0.85		
	3 days	27	3.86	0.67		
	4 days	18	4.03	0.64		
	5 days	17	3.95	0.76		
ANOVA Table						
		Sum of Squares	df	Mean Square	F	Sig.
Authentic Leadership *	Between Groups (Combined)	.751	4	.188	.517	.724
	Within Groups	27.999	77	.364		
	Total	28.750	81			
Ethical Leadership *	Between Groups (Combined)	.714	4	.178	.280	.890
	Within Groups	49.061	77	.637		
	Total	49.775	81			
Transactional Leadership *	Between Groups (Combined)	1.239	4	.310	.612	.655
	Within Groups	38.981	77	.506		
	Total	40.220	81			
Transformational Leadership *	Between Groups (Combined)	.541	4	.135	.254	.907
	Within Groups	41.044	77	.533		
	Total	41.585	81			

The ANOVA results on the effect of the project team's characteristics of gender, age, education, experience in projects, project types, and degree of virtuality on the application of various leadership styles showed insignificant differences on the AL, EL, TSL, and TFL, except for the effect of experience working on projects on EL. Experience also had approaching significance with moderate effect size on AL and TFL. Hence the results from one-way ANOVA supported the rejection of the null hypothesis (H_02B). Refer to Section 3.3 of Chapter III for details of hypotheses.

4.3 Research Question Three

RQ3 - How does the Project Manager’s leadership style impact project performance/success in a hybrid environment?

Pearson correlation coefficients were computed to assess the relationships between different leadership styles and PP. The results are presented in Table 4.9. The combined leadership style (LS) score was computed with the mean of AL, EL, TSL, and TFL. The correlation analysis demonstrated that AL, EL, TSL, TFL, and LS are significantly associated with PP. EL ($r = .736$) and AL ($r = .704$) exhibited the strongest positive relationships with PP. TFL ($r = .683$) also showed a strong positive association with PP. TSL, while still significant, showed a weaker but positive relationship ($r = .379$) compared to the other leadership styles. The combined leadership styles showed a strong positive effect ($r = .716$) on the PP of the hybrid project teams.

Table 4.9
Correlation Analysis Between Leadership Styles and Project Performance

Variable	AL	EL	TSL	TFL	LS	PP
Authentic Leadership	1					
Ethical Leadership	.883**	1				
Transactional Leadership	.510**	.462**	1			
Transformational Leadership	.844**	.866**	.545**	1		
Combined Leadership Style	.920**	.922**	.720**	.933**	1	
Project Performance	.704**	.736**	.379**	.683**	.716**	1

**p < .001. Correlation is significant at the 0.01 level (2-tailed)

Four simple linear regressions were conducted to examine the impact of each leadership style namely AL, EL, TSL, and TFL on PP independently. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.10. The results of the regression of PP on AL indicated that AL significantly predicted PP, $R^2 = .496$, $F = 78.830$, $p < .001$, and approximately 49.6% of the variance in PP could be explained by AL. The unstandardized regression

coefficient for AL was .925, with a standard error of .104, indicating that for each one-unit increase in AL, PP increased by .925 units. The positive standardized coefficient ($\beta = .704$, $t = 8.879$, $p < .001$) indicated a strong positive and significant relationship between AL and PP.

Table 4.10
Simple Regression Analysis Between Leadership Styles and Project Performance

Independent Variable	Coefficients					Model		ANOVA	
	B	StdError	Beta	t	Sig (p)	R	R ²	F	Sig (p)
Authentic Leadership	0.925	0.104	0.704	8.879	<.001	.704 ^a	0.496	78.830	<.001 ^b
Ethical Leadership	0.734	0.076	0.736	9.718	<.001	.736 ^a	0.541	94.435	<.001 ^b
Transactional Leadership	0.421	0.115	0.379	3.667	<.001	.379 ^a	0.144	13.450	<.001 ^b
Transformational Leadership	0.745	0.089	0.683	8.353	<.001	.683 ^a	0.466	69.771	<.001 ^b

Dependent Variable: Project Performance

Similarly, the results of the regression of PP on EL and TFL also indicated highly significant results. EL significantly predicted PP, $R^2 = .541$, $F = 94.435$, $p < .001$, and approximately 54.1% of the variance in PP could be explained by EL. Each unit increase in EL resulted in a 0.734 unit increase in PP, with a strong positive relationship ($\beta = .736$, $t = 9.718$, $p < .001$). TFL significantly predicted PP, $R^2 = .466$, $F = 69.771$, $p < .001$, and approximately 46.6% of the variance in PP could be explained by TFL. Each unit increase in TFL resulted in a 0.745 unit increase in PP, with a strong positive relationship ($\beta = .683$, $t = 8.353$, $p < .001$).

The results of the regression of PP on TSL, however, indicated a significant and moderate relationship. TSL significantly predicted PP, $R^2 = .144$, $F = 13.450$, $p < .001$, and approximately 14.4% of the variance in PP could be explained by TSL. Each unit increase in TSL resulted in a 0.421 unit increase in PP, with a moderate positive relationship ($\beta = .379$, $t = 3.667$, $p < .001$). These results indicated that independently each leadership style examined had a significant impact on the PP at varying degrees.

A multiple linear regression was then performed to evaluate the combined effect of AL, EL, TSL, and TFL on PP and to predict PP based on these leadership styles. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.11. The results of the multiple regression and ANOVA table indicated that a combination of leadership styles significantly predicted PP, $R^2 = .558$, $F(4,77) = 24.296$, $p < .001$, and that the model is a good fit for the data. This indicated that approximately 55.8% of the variance in PP could be explained by these leadership styles.

Table 4.11
Regression Analysis Between Leadership Styles and Project Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.747 ^a	0.558	0.535	0.53322		
a. Predictors: (Constant), Transformational Leadership, Transactional Leadership, Authentic Leadership, Ethical Leadership						
ANOVA^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.632	4	6.908	24.296	<.001 ^b
	Residual	21.893	77	0.284		
	Total	49.525	81			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), Transformational Leadership, Transactional Leadership, Authentic Leadership, Ethical Leadership						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.476	0.420		1.135	0.260
	Authentic Leadership	0.271	0.228	0.207	1.191	0.237
	Ethical Leadership	0.452	0.185	0.453	2.446	0.017
	Transactional Leadership	0.003	0.102	0.003	0.029	0.977

Transformational Leadership	0.124	0.183	0.114	0.682	0.497
a. Dependent Variable: Project Performance					

The unstandardized regression coefficient for EL was .452, with a standard error of .185, which was significant ($t = 2.446, p < .05$). This indicated that EL was a significant predictor of PP. For every one-unit increase in EL, PP increased by .452 units, holding all other variables constant. The positive standardized coefficient ($\beta = .453$) indicated a strong positive relationship between EL and PP. The standardized coefficient (Beta) for AL was .207 ($t = 1.191, p = .237$), TSL was .003 ($t = .029, p = .977$), and TFL was .114 ($t = .682, p = .497$) and were statistically not significant. The data suggested that AL, TSL, and TFL did not significantly predict PP in this combined leadership model. The regression equation can be expressed as:

$$PP = 0.476 + 0.271 \times AL + 0.452 \times EL + 0.003 \times TSL + 0.124 \times TFL + \varepsilon \text{ (error term)}$$

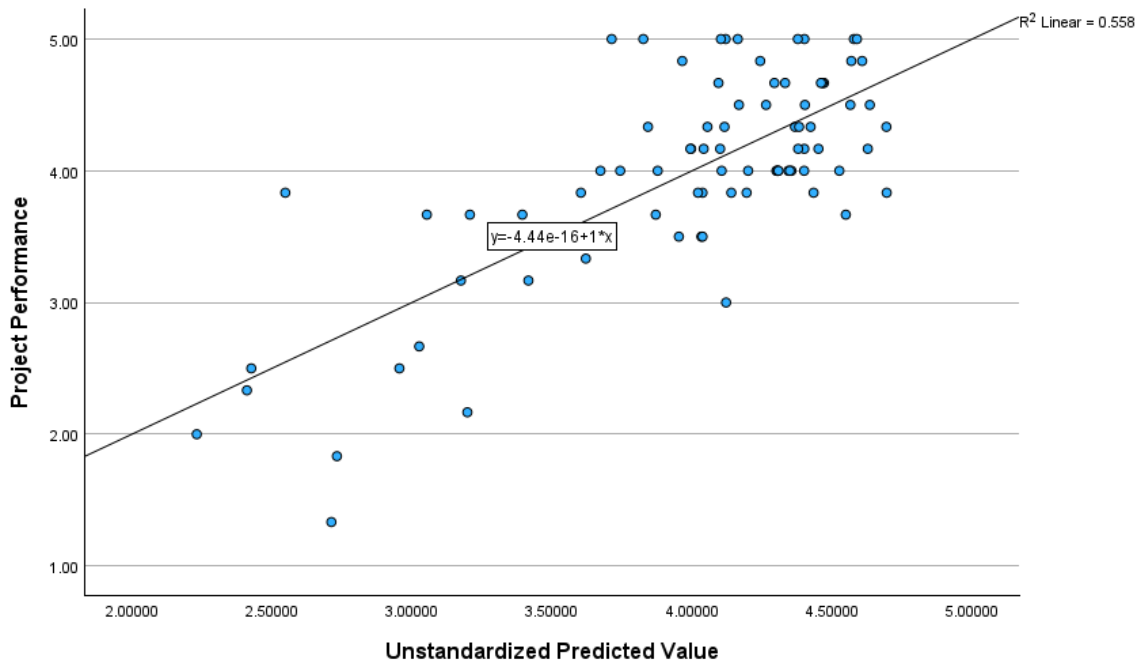


Figure 4.1
Scatter Plot of Leadership Styles and Project Performance

A simple linear regression was also conducted to examine the impact of combined LS as a unit on PP. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.12. The results of the regression indicated that LS significantly predicted PP, $R^2 = .513$, $F(1,80) = 84.361$, $p < .001$ and that the model is a good fit for the data. Approximately 51.3% of the variance in PP could be explained by combined LS. The unstandardized regression coefficient for LS was .916, with a standard error of .100, indicating that for each one-unit increase in LS, PP increased by .916 units. The positive standardized coefficient ($\beta = .716$, $t = 9.185$, $p < .001$) indicated a strong positive relationship between LS and PP. The regression equation can be written as:

$$PP = 0.407 + 0.916 \times LS + \varepsilon \text{ (error term)}$$

Table 4.12
Regression Analysis Between Combined Leadership Style and Project Performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.716 ^a	0.513	0.507	0.54892		
a. Predictors: (Constant), Leadership Style						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.419	1	25.419	84.361	<.001 ^b
	Residual	24.105	80	0.301		
	Total	49.525	81			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), Leadership Style						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.407	0.395		1.029	0.306
	Leadership Style	0.916	0.100	0.716	9.185	<0.001
a. Dependent Variable: Project Performance						

The above correlation analysis and regression analysis results supported rejecting the null hypothesis H_03 and accepting the alternative hypothesis as some results were significant and correlation results and simple linear regression results supported the alternative hypotheses. Refer to Section 3.3 of Chapter III for details of hypotheses.

4.4 Research Question Four

RQ4 - How does the Project Manager's leadership style impact the quality of the relationship between the Project Manager and the project team members (LMX) in a hybrid environment?

Pearson correlation coefficients were computed to assess the relationships between four types of leadership styles (AL, EL, TSL, and TFL), the combined LS and LMX. The results are presented in Table 4.13. The correlation analysis demonstrated that all leadership styles assessed are significantly associated with LMX. Specifically, TFL ($r = .846$) and AL ($r = .807$) exhibited the strongest positive relationships with LMX, indicating that these leadership styles are particularly influential in achieving high-quality LMX. EL ($r = .797$) also showed a strong positive association with effective LMX. TSL, while still significant, showed a moderate positive relationship ($r = .547$), implying that it is less influential than the other leadership styles. The combined LS showed a strong positive correlation with LMX ($r = .857$), indicating that overall leadership effectiveness is positively related to LMX.

Four simple linear regressions were conducted to examine the impact of each leadership style: AL, EL, TSL, and TFL on LMX. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.14. The results of the regression of LMX on AL indicated that AL significantly predicted LMX, $R^2 = .652$, $F = 149.850$, $p < .001$, and approximately 65.2% of the variance in LMX could be explained by AL. The unstandardized regression

coefficient for AL was .938, with a standard error of .077, indicating that for each one-unit increase in AL, LMX increased by .938 units. The positive standardized coefficient ($\beta = .807$, $t = 12.241$, $p < .001$) indicated a strong positive and highly significant relationship between AL and LMX.

Table 4.13
Correlation Analysis Between Leadership Styles and LMX

Variable	AL	EL	TSL	TFL	LS	LMX
Authentic Leadership	1					
Ethical Leadership	.883**	1				
Transactional Leadership	.510**	.462**	1			
Transformational Leadership	.844**	.866**	.545**	1		
Combined Leadership Style	.920**	.922**	.720**	.933**	1	
LMX	.807**	.797**	.547**	.846**	.857**	1

**p < .001. Correlation is significant at the 0.01 level (2-tailed)

Table 4.14
Simple Regression Analysis Between Leadership Styles and LMX

Independent Variable	Coefficients					Model		ANOVA	
	B	StdError	Beta	t	Sig (p)	R	R ²	F	Sig (p)
Authentic Leadership	0.938	0.077	0.807	12.241	<.001	.807 ^a	0.652	149.850	<.001 ^b
Ethical Leadership	0.704	0.060	0.797	11.816	<.001	.797 ^a	0.636	139.606	<.001 ^b
Transactional Leadership	0.538	0.092	0.547	5.849	<.001	.547 ^a	0.300	34.213	<.001 ^b
Transformational Leadership	0.817	0.058	0.846	14.164	<.001	.846 ^a	0.715	200.615	<.001 ^b

Dependent Variable: LMX

Similarly, the results of the regression of LMX on EL and TFL also indicated highly significant results. EL significantly predicted LMX, $R^2 = .636$, $F = 139.606$, $p < .001$, and approximately 63.6% of the variance in LMX could be explained by EL. Each unit increase in EL resulted in a 0.704 unit increase in LMX, with a strong positive relationship ($\beta = .797$, $t = 11.816$, $p < .001$). TFL significantly predicted LMX, $R^2 = .715$,

F = 200.615, $p < .001$, and approximately 71.5% of the variance in LMX could be explained by TFL. Each unit increase in TFL resulted in a 0.817 unit increase in LMX, with a strong positive relationship ($\beta = .846$, $t = 14.164$, $p < .001$).

However, the regression results of LMX on TSL indicated a significant and moderate relationship. TSL significantly predicted LMX, $R^2 = .300$, $F = 34.213$, $p < .001$, and approximately 30.0% of the variance in LMX could be explained by TSL. Each unit increase in TSL resulted in a 0.538 unit increase in LMX, with a moderate positive relationship ($\beta = .547$, $t = 5.849$, $p < .001$). The results indicated that independently each leadership style examined had a significant impact on the LMX at varying degrees.

A multiple linear regression was then performed to evaluate the combined effect of AL, EL, TSL, and TFL on LMX and to predict LMX based on these leadership styles. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.15. The results of the multiple regression and ANOVA table indicated that a combination of leadership styles significantly predicted LMX, $R^2 = .755$, $F(4,77) = 59.259$, $p < .001$, and that the model is a good fit for the data. This indicated that approximately 75.5% of the variance in LMX could be explained by these leadership styles.

Table 4.15
Regression Analysis Between Leadership Styles and LMX

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.869 ^a	0.755	0.742	0.35146		
a. Predictors: (Constant), Transformational Leadership, Transactional Leadership, Authentic Leadership, Ethical Leadership						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.279	4	7.320	59.259	<.001 ^b

	Residual	9.511	77	0.124		
	Total	38.791	81			
a. Dependent Variable: LMX						
b. Predictors: (Constant), Transformational Leadership, Transactional Leadership, Authentic Leadership, Ethical Leadership						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.178	0.277		0.643	0.522
	Authentic Leadership	0.288	0.150	0.248	1.922	0.058
	Ethical Leadership	0.100	0.122	0.113	0.819	0.415
	Transactional Leadership	0.105	0.067	0.107	1.571	0.120
	Transformational Leadership	0.463	0.120	0.480	3.852	<0.001
a. Dependent Variable: LMX						

The unstandardized regression coefficient for TFL was .463, with a standard error of .120, which was significant ($t = 3.852$, $p < .001$). This indicated that TFL was a strong and significant predictor of LMX. For every one-unit increase in TFL, LMX increased by .463 units, holding all other variables constant. The positive standardized coefficient ($\beta = .480$) indicated a strong positive relationship between TFL and LMX. The standardized coefficient (Beta) for AL was .248 ($t = 1.922$, $p = .058$), EL was .113 ($t = .819$, $p = .415$), and TSL was .107 ($t = 1.571$, $p = .120$). This suggested that there is a positive relationship between AL, EL, and TSL, but these leadership styles were not significant predictors of LMX in this model. The regression equation can be expressed as:

$$\text{LMX} = 0.178 + 0.288 \times \text{AL} + 1.00 \times \text{EL} + 0.105 \times \text{TSL} + 0.463 \times \text{TFL} + \varepsilon \text{ (error term)}$$

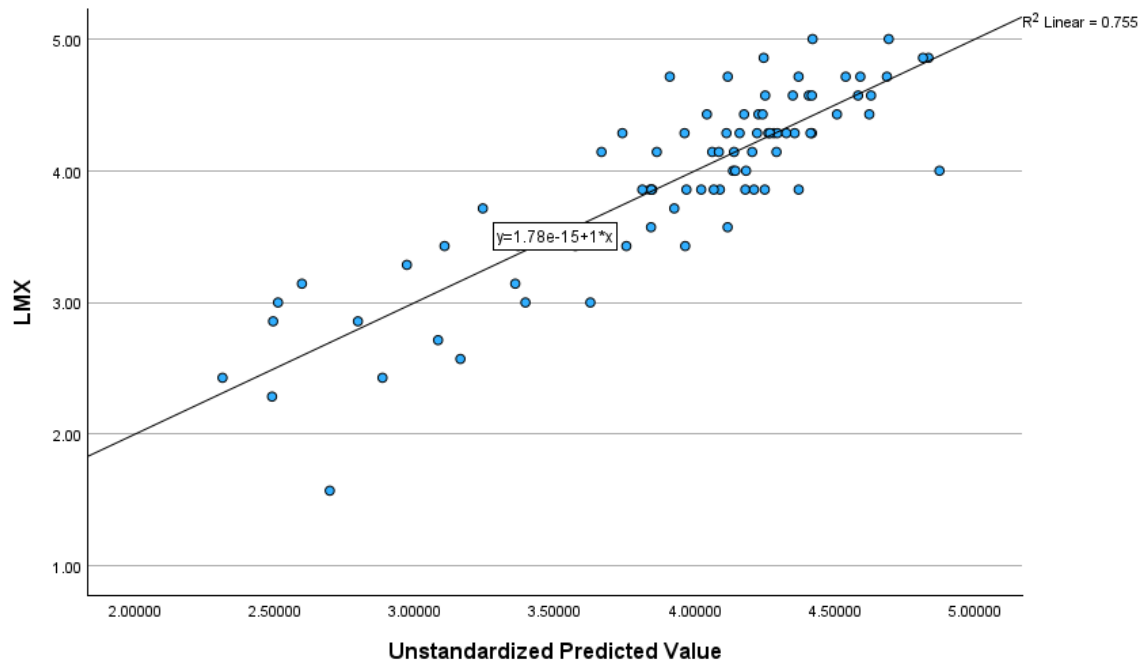


Figure 4.2
Scatter Plot of Leadership Styles and LMX

A simple linear regression was also conducted to evaluate the effect of the combined LS as a unit on LMX. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.16. The results of the regression indicated that LS significantly predicted LMX, $R^2 = .735$, $F(1,80) = 221.853$, $p < .001$, and that the model is a good fit for the data. Approximately 73.5% of the variance in LMX could be explained by combined LS. The unstandardized regression coefficient for LS was .970, with a standard error of .065, indicating that for each one-unit increase in LS, LMX increased by .970 units. The positive standardized coefficient ($\beta = .857$, $t = 14.895$, $p < .001$) indicated a strong positive and significant relationship between LS and LMX. The regression equation can be written as:

$$\text{LMX} = 0.151 + 0.970 \times \text{LS} + \varepsilon \text{ (error term)}$$

Table 4.16

Regression Analysis Between Combined Leadership Styles and LMX

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.857 ^a	0.735	0.732	0.35848		
a. Predictors: (Constant), Leadership Style						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.510	1	28.510	221.853	<.001 ^b
	Residual	10.281	80	0.129		
	Total	38.791	81			
a. Dependent Variable: LMX						
b. Predictors: (Constant), Leadership Style						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.151	0.258		0.583	0.561
	Leadership Style	0.970	0.065	0.857	14.895	<0.001
a. Dependent Variable: LMX						

The above correlation analysis and regression analysis results supported rejecting the null hypothesis H₀₄ and accepting the alternative hypothesis as some results were significant and correlation results and simple linear regression results supported the alternative hypotheses. Refer to Section 3.3 of Chapter III for details of hypotheses.

4.5 Research Question Five

RQ5 - How does the quality of the relationship between the Project Manager and hybrid project team members (LMX) impact the project performance?

4.5.1 LMX and Project Performance

The descriptive statistics and correlation analysis of LMX and PP are presented in Table 4.17. The means and standard deviations were LMX (M = 3.95, SD = 0.69) and PP (M = 3.99, SD = 0.78). The Pearson correlation coefficients between LMX and PP

indicated significant strong positive correlations ($r = .665$, $p < .001$), indicating that as the quality of LMX improved, PP also improved.

Table 4.17

Descriptives and Correlation Analysis Between LMX and Project Performance

Variable	Mean (M)	Std. Deviation (SD)	LMX	PP
LMX	3.95	0.69	1	
Project Performance	3.99	0.78	.665**	1
** $p < .001$. Correlation is significant at the 0.01 level (2-tailed)				

A simple linear regression was conducted to examine the impact of LMX on PP and to predict PP based on LMX. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.18. The results of the regression indicated that LMX significantly predicted PP, $R^2 = .442$, $F(1,80) = 63.382$, $p < .001$, and that the model is a good fit for the data. Approximately 44.2% of the variance in PP could be explained by LMX. The unstandardized regression coefficient for LMX was .751, with a standard error of .094, indicating that for each one-unit increase in LMX, PP increased by .751 units. The positive standardized coefficient ($\beta = .665$, $t = 7.961$, $p < .001$) indicated a strong positive and significant relationship between LMX and PP. The regression equation can be written as:

$$PP = 1.027 + 0.751 \times LMX + \varepsilon \text{ (error term)}$$

Table 4.18

Regression Analysis Between LMX and Project Performance

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.665 ^a	0.442	0.435	0.58771	
a. Predictors: (Constant), LMX					
ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.

1	Regression	21.892	1	21.892	63.382	<.001 ^b
	Residual	27.632	80	0.345		
	Total	49.525	81			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), LMX						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.027	0.378		2.714	0.008
	LMX	0.751	0.094	0.665	7.961	<0.001
a. Dependent Variable: Project Performance						

The results of the above correlation analysis and simple linear regression analysis supported rejecting the null hypothesis H₀5A and accepting the alternative hypothesis. Refer to Section 3.3 of Chapter III for details of hypotheses.

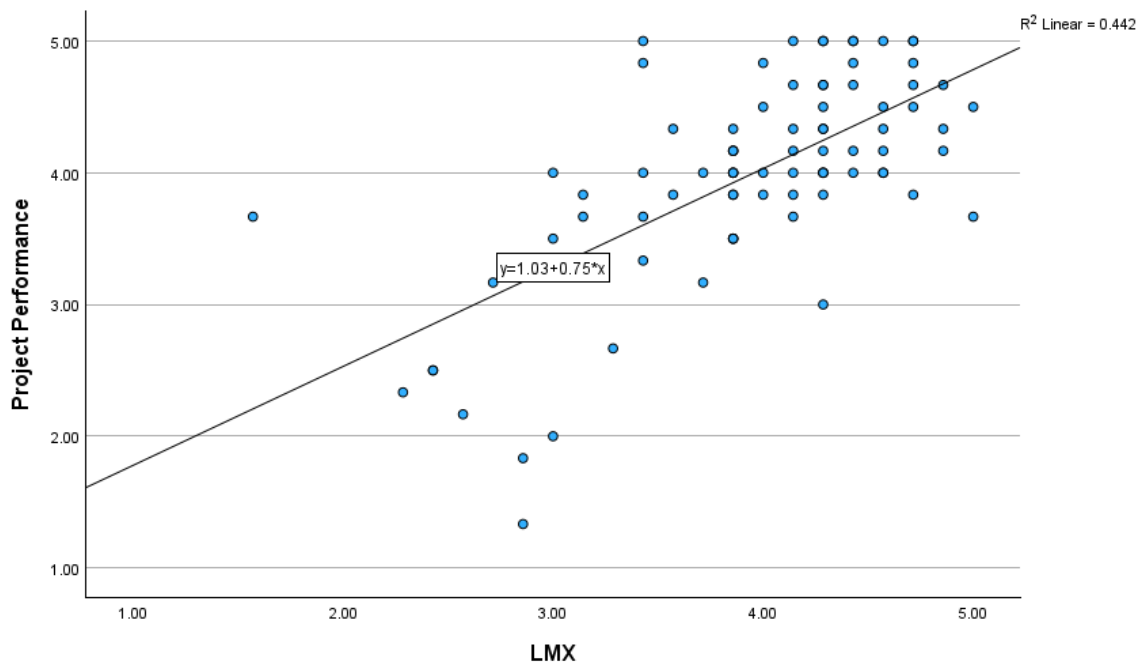


Figure 4.3
Scatter Plot of LMX and Project Performance

4.5.2 LMX as a Mediator between Leadership Styles and Project Performance

The mediating effect of LMX on the relationship between combined leadership styles and PP was tested using the regression analysis suggested by Baron and Kenny (1986). According to Baron and Kenny (1986) and as elaborated by Yang *et al.* (2013), the following conditions are to be met before testing for the mediating effect: LS (independent variable) must significantly affect LMX (presumed mediator) – ‘Path a’ (H_a4.1), LMX (presumed mediator) must significantly affect PP (dependent variable) – ‘Path b’ (H_a5A) and LS (independent variable) must significantly affect PP (dependent variable) – ‘Path c’ (H_a3.1). The mediating effect (H_a5B) is accepted when controlling ‘Path a’ and ‘Path b’ will result in the previously significant relationship between LS and PP in ‘Path c’ decreasing or becoming no longer significant (Baron and Kenny, 1986).

Table 4.11 and Table 4.15 indicated that regression of PP and LMX on AL, EL, TSL, and TFL resulted in a significant model, but, the effect of each leadership style on either PP or LMX was not significant. However, when the combined LS was used in the regression model, both the model and the effect of LS on PP and LMX were respectively statistically significant, meeting the conditions for the mediation test outlined by Baron and Kenny (1986). Hence, combined LS has been used to test the mediating effect of LMX on the relationship between combined leadership styles and PP rather than individual leadership styles of AL, EL, TSL, and TFL.

A multiple linear regression was performed to evaluate the effect of combined LS and LMX on PP. The regression and ANOVA results of the model along with coefficients of the relationship between the variables are presented in Table 4.19. The results of the multiple regression and ANOVA table indicated that a combination of leadership styles and LMX significantly predicted PP, $R^2 = .523$, $F(2,79) = 43.301$, $p < .001$, and that the model is a good fit for the data. This indicated that approximately

52.3% of the variance in PP could be accounted for by the combined leadership styles and LMX. The unstandardized regression coefficient for combined LS was .706, with a standard error of .193, indicating that for each one-unit increase in LS, PP increased by .706 units. The positive standardized coefficient ($\beta = .553$, $t = 3.660$, $p < .001$) indicated a moderate positive and significant relationship between LS and PP when LMX was present. The result indicated that LMX was not a significant predictor of PP when LS was included in the model. The regression equation can be written as:

$$PP = 0.374 + 0.706 \times LS + 0.216 \times LMX + \varepsilon \text{ (error term)}$$

Table 4.19

Regression of Project Performance on Combined Leadership Styles and LMX

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.723 ^a	0.523	0.511	0.54686		
a. Predictors: (Constant), Leadership Style, LMX						
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	25.899	2	12.950	43.301	<.001 ^b
	Residual	23.626	79	0.299		
	Total	49.525	81			
a. Dependent Variable: Project Performance						
b. Predictors: (Constant), Leadership Style, LMX						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.374	0.395		0.949	0.346
	LMX	0.216	0.171	0.191	1.267	0.209
	Leadership Style	0.706	0.193	0.553	3.660	<0.001
a. Dependent Variable: Project Performance						

Table 4.20 shows the results of four regression analyses conducted to test the mediating effect of LMX on the relationship between combined LS and PP. The results indicated that the impact of LS on PP remained significant ($\beta = .553$, $t = 3.660$, $p < .001$), but was reduced when the LMX was included in the model compared to when LMX was not included ($\beta = .716$, $t = 9.185$, $p < .001$). The results suggested that LMX partially mediated the relationship between LS and PP, thus rejecting the null hypothesis H_{05B} . Refer to Section 3.3 of Chapter III for details of hypotheses.

Table 4.20
Results of Regression Analysis for Mediating Effect of LMX

Independent Variable	Coefficients					Model		ANOVA	
	B	StdError	Beta	t	Sig (p)	R	R ²	F	Sig (p)
Leadership Style	0.916	0.100	0.716	9.185	<0.001	.716 ^a	0.513	84.361	<.001 ^b
Dependent Variable: Project Performance									
Leadership Style	0.970	0.065	0.857	14.895	<0.001	.857 ^a	0.735	221.853	<.001 ^b
Dependent Variable: LMX									
LMX	0.751	0.094	0.665	7.961	<0.001	.665 ^a	0.442	63.382	<.001 ^b
Dependent Variable: Project Performance									
Leadership Style	0.706	0.193	0.553	3.660	<0.001	.723 ^a	0.523	43.301	<.001 ^b
LMX	0.216	0.171	0.191	1.267	0.209				
Dependent Variable: Project Performance									

4.6 Summary of Findings

The summary of hypotheses testing, statistical tests used, the key findings, and the results are listed in Table 4.21. All null hypotheses were rejected based on the results of the quantitative descriptive and inferential statistical analyses through means, EFA, correlation, simple linear regression, and multiple regression analyses.

Table 4.21

Summary of Hypotheses Testing and Results

Research Question	Hypothesis (Section 3.3)	Statistical Test	Measure & Significance	Result
RQ1 - Which leadership styles among Authentic, Ethical, Transactional, and Transformational, are the effective leadership styles for a Project Manager to lead hybrid project teams in the banking industry in Australia?	H ₀ 1	Correlation Analysis		Rejected
	H _a 1.1: AL		$r = .704, p < .001$	Strong, Positive, Significant Accepted
	H _a 1.2: EL		$r = .736, p < .001$	Strong, Positive, Significant Accepted
	H _a 1.3: TSL		$r = .379, p < .001$	Moderate, Positive, Significant Accepted
	H _a 1.4: TFL		$r = .683, p < .001$	Strong, Positive, Significant Accepted
RQ2 - Why is project leadership of hybrid teams in the banking industry in Australia a combination of multiple key leadership styles?	H ₀ 2A	Means		Rejected
	H _a 2A	Exploratory Factor Analysis	AL (M = 4.00, SD = 0.60) EL (M = 4.27, SD = 0.78) TSL (M = 3.45, SD = 0.70) TFL (M = 3.95, SD = 0.72) Factor loading > 0.3, $p < .001$	Factor loading > 0.3 in multiple components indicating overlap with other leadership styles Accepted
	H ₀ 2B	Means and ANOVA		Rejected
	H _a 2B		<i>Experience in projects:</i> EL - $F(4, 77) = 3.14, p = .019, \eta^2 = .140$ AL - $F(4, 77) = 2.40, p = .057, \eta^2 = .111$ TFL - $F(4, 77) = 2.463, p = .052, \eta^2 = .113$ <i>Type of project:</i> TFL - $F(2, 79) = 2.83, p = .065, \eta^2 = .067$	Indication of moderate significant effect of experience in projects on the Ethical Leadership Accepted
RQ3 - How does the Project Manager's leadership style impact project performance/success	H ₀ 3	Correlation Analysis		Rejected
	H _a 3.1: LS	Simple Regression	$r = .716, p < .001$ $R^2 = .513, F = 84.361, p < .001$ $\beta = .716, t = 9.185, p < .001$	Strong, Positive, Significant Accepted

Research Question	Hypothesis (Section 3.3)	Statistical Test	Measure & Significance	Result
in a hybrid environment?	Ha3.2: AL	Analysis Multiple Regression Analysis	$r = .704, p < .001$ <i>Simple Regression:</i> $R^2 = .496, F = 78.830, p < .001$ $\beta = .704, t = 8.879, p < .001$ <i>Multiple Regression:</i> $R^2 = .558, F = 24.296, p < .001$ $\beta = .207, t = 1.191, p > .05$	Strong, Positive, Significant Accepted
	Ha3.3: EL		$r = .736, p < .001$ <i>Simple Regression:</i> $R^2 = .541, F = 94.435, p < .001$ $\beta = .736, t = 9.718, p < .001$ <i>Multiple Regression:</i> $R^2 = .558, F = 24.296, p < .001$ $\beta = .453, t = 2.446, p < .05$	Strong, Positive, Significant Accepted
	Ha3.4: TSL		$r = .379, p < .001$ <i>Simple Regression:</i> $R^2 = .144, F = 13.450, p < .001$ $\beta = .379, t = 3.667, p < .001$ <i>Multiple Regression:</i> $R^2 = .558, F = 24.296, p < .001$ $\beta = .003, t = .029, p > .05$	Moderate, Positive, Significant Accepted
	Ha3.5: TFL		$r = .683, p < .001$ <i>Simple Regression:</i> $R^2 = .466, F = 69.771, p < .001$ $\beta = .683, t = 8.353, p < .001$ <i>Multiple Regression:</i> $R^2 = .558, F = 24.296, p < .001$ $\beta = .114, t = .682, p > .05$	Strong, Positive, Significant Accepted
RQ4 - How does the Project Manager's leadership style impact the quality of the relationship between the Project	Ho4	Correlation Analysis		Rejected
	Ha4.1: LS	Multiple Regression Analysis	$r = .857, p < .001$ $R^2 = .735, F = 221.853, p < .001$ $\beta = .857, t = 14.895, p < .001$	Strong, Positive, Significant Accepted

Research Question	Hypothesis (Section 3.3)	Statistical Test	Measure & Significance	Result
Manager and the project team members (LMX) in a hybrid environment?	H _a 4.2: AL		$r = .807, p < .001$ <i>Simple Regression:</i> $R^2 = .652, F = 149.850, p < .001$ $\beta = .807, t = 12.241, p < .001$ <i>Multiple Regression:</i> $R^2 = .755, F = 59.259, p < .001$ $\beta = .248, t = 1.922, p > .05$	Strong, Positive, Significant Accepted
	H _a 4.3: EL		$r = .797, p < .001$ <i>Simple Regression:</i> $R^2 = .636, F = 139.606, p < .001$ $\beta = .797, t = 11.816, p < .001$ <i>Multiple Regression:</i> $R^2 = .755, F = 59.259, p < .001$ $\beta = .113, t = 0.819, p > .05$	Strong, Positive, Significant Accepted
	H _a 4.4: TSL		$r = .547, p < .001$ <i>Simple Regression:</i> $R^2 = .300, F = 34.213, p < .001$ $\beta = .547, t = 5.849, p < .001$ <i>Multiple Regression:</i> $R^2 = .755, F = 59.259, p < .001$ $\beta = .107, t = 1.571, p > .05$	Moderate, Positive, Significant Accepted
	H _a 4.5: TFL		$r = .846, p < .001$ <i>Simple Regression:</i> $R^2 = .715, F = 200.615, p < .001$ $\beta = .846, t = 14.164, p < .001$ <i>Multiple Regression:</i> $R^2 = .755, F = 59.259, p < .001$ $\beta = .480, t = 3.852, p < .001$	Strong, Positive, Significant Accepted
RQ5 - How does the quality of the relationship between the Project Manager and hybrid project team members (LMX)	H ₀ 5A	Correlation Analysis		Rejected
	H _a 5A		$r = .665, p < .001$ $R^2 = .442, F = 63.38, p < .001$ $\beta = .665, t = 7.961, p < .001$	Strong, Positive, Significant Accepted
	H ₀ 5B			Rejected

Research Question	Hypothesis (Section 3.3)	Statistical Test	Measure & Significance	Result
impact the project performance?	H _{a5B}	Regression Analysis and Mediation Analysis through Baron and Kenny (1986) Approach	Direct Effect: R ² = .513, F = 84.361, p < .001 β = .716, t = 9.185, p < .001 Indirect Effect: R ² = .523, F = 43.301, p < .001 β = .553, t = 3.660, p < .001	Partial mediation Accepted

4.7 Conclusion

This chapter reported the results of the descriptive and inferential statistical analyses conducted on the data collected from the sample of individuals (N = 82) who had worked on projects run in a hybrid work model in the Australian banking industry. The projects in the hybrid environment were completed by the time of the survey response so the outcome of the projects could be reported. The results of the hypotheses testing through means, exploratory factor analysis, correlation analysis, and regression analysis of various dependent and independent variables supported rejecting the null hypotheses as presented in Table 4.21.

The impact of various demographic characteristics of the project team members, the type of projects, and the degree of virtuality, measured through the number of days working remotely, on the PM's leadership styles (AL, EL, TSL, and TFL) was examined for the Australian banking industry through the means and one-way ANOVA. The results indicated that experience working on projects had a moderately positive significant impact on EL, while the effects on AL and TFL were also moderate and edged toward the acceptable significance level. The results also indicated a potential difference among project types, as there was an approaching significance for TFL, however, the p-value was still slightly above 0.05. The other factors did not significantly affect the PM's

leadership style, as there were no other statistically significant differences noted at the p-value < 0.05 .

The correlation and regression analysis results indicated that the PMs in the Australian banking industry used a combination of AL, EL, TSL, and TFL to lead hybrid project teams. The four leadership styles included in this research were effective, positively correlated to the PP, and significantly impacted the PP. These leadership styles also effectively predicted the change in PP. Similarly, these leadership styles had a significant positive effect on the quality of relationships between the PMs and hybrid project team members.

The impact of LMX on PP was also evaluated and found to have a positive significant effect. The test on the mediating role of the LMX between PM's leadership styles and PP, indicated a partial mediating effect as the combined LS showed a direct impact on PP as well as an indirect impact on PP, though diminished, with the presence of LMX. However, LMX showed an insignificant impact on PP when the combined LS was present in the model. The next chapter will explain the findings further and compare the results with the other research findings and literature.

CHAPTER V: DISCUSSION

5.1 Discussion of Results

The purpose of this research was to examine the effective leadership styles of the PMs working in the hybrid work model in the Australian banking industry, and leading the projects toward successful outcomes. This study had three objectives aligned with the research purpose: (a) To examine the effective leadership styles prevalent among the PMs working in the hybrid environment; (b) To validate the Project Leadership Research Model (Figure 3.1) to examine the relationships between the PM's leadership style, the LMX between the PM and the hybrid project team members, and PP, and (c) to determine whether LMX is a mediator in the association between the PM's leadership styles and PP. The objectives aligned with the findings of a literature review which indicated that most models explaining the relationship between project leadership and project success are based on theory rather than on empirical evidence (Belout and Gauvreau, 2004).

Five research questions were developed and seven null hypotheses with their corresponding alternative hypotheses and their sub-hypotheses, where applicable, were formulated to achieve the objectives of this study. The research questions and hypotheses details can be found in Section 3.3 of Chapter III. The online survey was used to gather data from PMs, project team members, and project stakeholders who had worked on the projects in the hybrid environment and the projects had now been completed. This condition helped ascertain the project's outcome and assess the influence of the PM's leadership style on the LMX and PP.

This empirical study results aligned with the literature review findings indicating that AL, EL, TSL, and TFL were the effective project leadership styles used by PMs to

lead hybrid project teams in Australian banks. PMs used a combination of these leadership styles at varying degrees to lead the hybrid teams. The results indicated that the project team characteristics, project type, and degree of virtuality had statistically not significant influence on the application of the PM's leadership styles. However, the hybrid team member's experience working on the projects had a moderately significant impact on the PM's leadership style. The type of project also influenced the PM's leadership style to some extent. These results are believed to be banking industry-specific outcomes.

The leadership styles studied in this research could be considered effective as they had a significant positive effect on both PP and LMX between the PMs and hybrid project team members. PMs showing higher levels of these leadership styles in this research influenced the LMX by projecting high-quality relationships between the PMs and hybrid project team members, while also driving favorable project outcomes. The research also empirically examined the effect of LMX on PP and the relationship between PM's leadership styles and PP, indicating that LMX had a positive significant impact on PP. LMX also partially mediated the relationship between the PM's combined LS and PP, concluding that the PM's leadership style has a direct impact on the PP and an indirect impact on the PP through an enhanced LMX relationship.

The Australian banking industry, characterized by its dynamic and highly regulated environment, requires effective leadership to navigate challenges and drive project success. Adding a layer of virtuality through a hybrid work model adds other unique leadership challenges to the mix. The four leadership styles examined in this research (AL, EL, TSL, and TFL) offer various advantages that are particularly relevant to the projects run in the hybrid work model in the banking industry.

PMs demonstrating AL behaviors promote an environment of trust and transparency, which are essential for a highly regulated industry, especially in a hybrid environment. This can improve customer trust, employee engagement, and morale as well as employee connection, hence leading to enhanced productivity and commitment to project goals. EL is crucial for ensuring compliance with stringent banking regulations in Australia. EL also provides a consistent and fair approach to managing hybrid teams. PMs who prioritize ethics help instill a culture of accountability and adherence to legal standards. PMs demonstrating high EL behaviors help safeguard the bank's reputation by promoting fair and honest practices, which is vital in an industry where trust is paramount. Ethical PMs also offer moral guidance, which can help navigate the ethical dilemmas that may arise in a hybrid work model, such as issues related to data privacy, work-life balance, etc.

PMs demonstrating TFL behaviors inspire and motivate their teams to embrace change and innovate. These characteristics are essential for banks to stay competitive and respond to technological advancements and evolving customer needs. Adaptability and innovation are relevant for the hybrid project team for managing the dynamic and flexible nature of the hybrid work. Creating a compelling vision for the future, and connecting the project goal with the bank's overall strategy and mission is also relevant. PMs must demonstrate TSL behaviors as well, as PMs with TSL provide a clear structure and guidance, essential for maintaining efficiency and meeting regulatory requirements in the banking industry. TSL is effective for managing routine tasks and ensuring hybrid project team members meet established performance standards and deadlines. The sections below will discuss the results of each hypothesis tested empirically in detail.

5.2 Discussion of Research Question One

RQ1 - Which leadership styles among Authentic, Ethical, Transactional, and Transformational, are the effective leadership styles for a Project Manager to lead hybrid project teams in the banking industry in Australia?

Four alternative sub-hypotheses ($H_{a1.1}$, $H_{a1.2}$, $H_{a1.3}$, and $H_{a1.4}$) were formulated to examine the effective leadership styles among AL, EL, TSL, and TFL. The descriptive statistics and correlation results of various leadership styles and PP supported the alternative hypotheses, suggesting that AL, EL, TSL, and TFL are all effective leadership styles of the PMs. The effectiveness of project leadership refers to the success of the project (Hyväri, 2006). The descriptive statistics with means and standard deviations indicated that the means of AL, EL, TFL, and PP were close together, suggesting that the average scores of these variables did not vary widely. While TSL, on average, was rated lower. The standard deviation was also relatively close, suggesting that the variability of scores around the mean is similar across these variables. The relatively consistent standard deviations also suggested that the reliability of the responses across different variables is comparable. The overall descriptive statistics results suggested that PMs exhibited more AL, EL, and TFL behaviors, driving the projects to successful outcomes. While TSL also contributed to the success of the project, PMs exhibited less TSL behaviors.

The findings of correlation analysis revealed significant positive correlations between all examined leadership styles and PP, suggesting that effective leadership is crucial for successful project outcomes. However, the strength of these relationships varied among different leadership styles. AL, EL, and TFL showed strong positive correlations with PP, indicating that these leadership styles are particularly effective in enhancing PP. TSL showed a moderate positive correlation, suggesting that while it had a

positive impact, it was less effective compared to the other examined leadership styles. The results indicated that the PMs in the sample from the Australian banking industry displayed more EL behaviors, followed by AL, TFL, and then TSL behaviors. The results align with the view of the Project Management Institute, (2021) stating that effective leadership promotes project success and contributes to positive project outcomes.

The results of this study can be contextualized within several established leadership theories. The findings highlight the importance of adopting a leadership style emphasizing ethical behavior, authenticity, and transformation, aligning with the Behavioral Theory that advocates that effectiveness in leadership has to do with how the leader behaves (Hersey *et al.*, 2001). The findings relating to the effectiveness of AL align with previous research indicating that authentic leaders, who are transparent, ethical, and genuine, tend to foster trust and engagement among their team members, ultimately enhancing PP (Alimo-Metcalfe, 2013; Walumbwa *et al.*, 2008; George, 2003; Bass and Steidlmeier, 1999) as these factors are critical for successful project outcomes. This aligns with the principles of Authentic Leadership Theory, which emphasizes the importance of being true to oneself and leading with integrity (Avolio *et al.*, 2007; Avolio and Gardner, 2005; Gardner *et al.*, 2005; Avolio *et al.*, 2004; Luthans and Avolio, 2003).

The results on EL suggested that EL is the most effective leadership style for PMs among the examined leadership styles, as it exhibited the strongest correlation with PP. This suggests that leaders who prioritize ethical standards and moral behavior significantly contribute to the effectiveness of their projects. Ethical leaders create a culture of fairness and integrity (Project Management Institute, 2013), leading to higher team morale and productivity. This finding is consistent with the Ethical Leadership Theory, which highlights the influence of a leader's moral behavior on the ethical climate and performance of their organization (Brown and Treviño, 2006; Brown *et al.*, 2005;

Treviño *et al.*, 2003). Ethical leadership is an essential requirement to meet professional and project goals (Littman and Littman, 2019).

The results of the research also indicated that TFL was an effective leadership style employed by PMs in the Australian banking industry. TFL seemed to enhance project outcomes significantly. This aligns with the Transformational Leadership Theory which considers Transformational leaders to enhance project performance by creating a compelling vision, fostering an environment of intellectual stimulation, and showing individualized consideration for team members (Bass and Avolio, 1990; Bass, 1985; Burns, 1978). This aligns with the theory's assertion that transformational leaders elevate the motivation and performance of their followers by engaging with them on an emotional level (Bass and Avolio, 1990). The results also align with Yukl (2010) who suggests that the success of the TFL hinges on the leader's capability to inspire, motivate, and engage followers to attain organizational objectives.

Regarding TSL, the findings of the research indicated a moderate correlation with PP. TSL focused on clear structures, rewards, and penalties, and appeared to be less effective in driving high project success compared to other examined leadership styles. While TSL provides the necessary structure and motivation through clear rewards and penalties, it may lack the inspirational and developmental aspects critical for achieving exceptional PP. This aligns with the Transactional Leadership Theory's focus on exchanges between leader and follower, which, while effective for routine tasks, may not fully engage or inspire team members (Bass, 1985; Burns, 1978). Transactional leaders set targets and use reward, deprivation, or punishment as a means of motivating their followers (Cherry, 2020), which may not be effective strategies to motivate hybrid team members in the current context.

Teams working in a hybrid environment often value autonomy and flexibility in their work arrangements, while TSL focuses on rigid targets and close monitoring can reduce the sense of autonomy and flexibility, leading to decreased motivation and job satisfaction. Hybrid team members may be more intrinsically motivated, valuing meaningful work and personal growth over external rewards. TSL's reliance on external rewards and punishments may not resonate well with hybrid team members who are driven by intrinsic motivators, leading to decreased engagement and performance. Hybrid teams need to be adaptable to changes in work arrangements, technologies, and team dynamics. While TSL's structured approach may lack the flexibility required to adapt to the evolving needs and challenges of hybrid teams. Effective TSL relies on clear and frequent communication to set expectations and provide feedback, but, effective communication can be more challenging in hybrid teams. TSL focuses more on task completion and performance rather than relationship building. This can be detrimental in hybrid teams where trust and interpersonal relationships are crucial for collaboration and cohesion. The finding highlighted the importance of adapting leadership approaches to fit the unique dynamics of hybrid work environments.

The results of this research align with the findings of Bass (1998), who reiterated that effective leaders can demonstrate both TFL and TSL as they need to practice social exchange elements while working with team members, and also need to gain commitment from them. In a study of 72 US Army platoons, Bass *et al.* (2003) found that TSL contributes to effective leadership and is essential to successful performance. Hunt and Fitzgerald (2018) stated that TSL may generally be used by the middle management level, like PMs.

The results also align with the findings of other research in the hybrid environment like Wiatr and Skowron-Mielnik (2023), George (2018), and Günzel-Jensen

et al. (2018) who opine that hybrid teams need authentic leaders who can promote trust among team members, ease negative emotions, and enhance positive emotions. The study of Purvanova and Bono (2009) suggest that Transformational leadership is more effective in teams that rely solely on computer-mediated communication. Lee (2021), on the other hand, opines that the leadership style has now become more directive, being clearer on roles, responsibilities, and processes, hence implying that TSL may be effective.

The research results also align with previous studies conducted in the banking industry. The empirical study carried out by Girardi and Rubim Sarate (2023) in a Brazilian financial institution about TFL indicated a high perception of Transformational leadership - the leader as a transformational agent, inspires, encourages, considers, and motivates the team. The study conducted by Berber *et al.* (2019) found TFL as the dominant leadership style in most of the Serbian banks. The study by Geyery and Steyrer (1998) examined the relations between Transformational and Transactional leadership and performance indicators of 20 different banks and found both TFL and TSL prevalent in the banks.

The research findings underscore the importance of adopting a leadership style emphasizing ethical behavior, authenticity, and transformation. While TSL has its merits, particularly in structured and routine tasks, its moderate correlation with PP suggests it should be complemented with other leadership styles to maximize effectiveness.

5.3 Discussion of Research Question Two

RQ2 - Why is project leadership of hybrid teams in the banking industry in Australia a combination of multiple key leadership styles?

Two alternative hypotheses (H_{a2A} and H_{a2B}) were formulated to empirically examine the leadership styles of PMs in the Australian banking industry to answer RQ2. H_{a2A} was formulated to address the project leadership of hybrid project teams being a

combination of the four examined leadership styles. H_{a2B} was formulated to examine the factors, such as project team members' characteristics, project types, and degree of virtuality, impacting the varying degrees of leadership styles used to manage hybrid projects in the Australian banking industry.

5.3.1 Combination of Leadership Styles

The results of EFA and descriptive statistics (means) of the examined leadership styles (AL, EL, TSL, and TFL) used by PMs to lead hybrid projects in the Australian banking industry supported accepting the alternative hypothesis H_{a2A}. The descriptive statistics results indicate that EL is the most prevalent style among the PMs in the Australian banking industry, followed by AL, TFL, and TSL. PMs exhibited higher EL, AL, and TFL behaviors and moderate TSL behaviors. The results from EFA suggested that characteristics of AL, EL, TSL, and TFL are not particularly distinct and not mutually exclusive but rather interrelated and overlap. The results supported the concept that PMs use a combination of the examined leadership styles. PMs exhibited behaviors that aligned with multiple leadership styles simultaneously. The overlapping factor loadings reflect adaptability, showing that PMs do not adhere to a rigid, single-style approach. The overlap suggests that PMs do not confine themselves to a single leadership style but instead integrate aspects of various styles to adapt to different situations and team needs aligning with the Contingency and Situational Leadership Theory (Kovach, 2018; Bryman, 1993). PMs apply as many different leadership and communication styles as needed to bring the project to successful completion (*Winkler et al.*, 2022; Lee, 2021) by applying styles that best fit the needs of the projects.

The results also suggest that PMs likely use a flexible and adaptable approach to leadership. They draw from a range of leadership styles to effectively manage diverse hybrid project teams in dynamic environments. The overlap indicates a holistic leadership

approach, where PMs blend elements from various styles to create a more effective leadership strategy. This, in turn, will enhance their overall leadership effectiveness. This might involve combining the ethical integrity of EL, the genuine interactions of AL, the inspirational vision of TFL, and the clear structure of TSL. The results support the multi-dimensional project leadership concept illustrated in Effective Project Leadership Style for Hybrid Teams in Figure 2.1 and Project Leadership Framework for Hybrid Teams in Figure 2.2.

The results align with the other studies carried out in the leadership and project domain. The study by Brown *et al.* (2005) suggested that EL is positively related to “consideration behavior, interactional fairness, leader honesty, and the idealized influence dimension” of TFL. Bass (1985) suggested that TFL and TSL are two discrete dimensions and leaders may exhibit both behaviors at varying degrees. Avolio and Gardner (2005) found an overlap between AL and TFL. Hoch *et al.* (2018) also found correlations between AL, TSL, and TFL approaches with significant conceptual overlap. Brown and Treviño (2006) found some theoretical and empirical overlaps between AL and EL. The key characteristic of EL ‘acting for the greater good’ is consistent with the principle of TFL (Burns, 1978). EL also shows overlap with TSL with the use of appropriate rewards and punishments to reinforce ethical standards (Brown and Treviño, 2006; Brown *et al.*, 2005; Treviño *et al.*, 2003).

Other researchers have opined that effective leaders combine both TFL and TSL (Snodgrass and Shachar, 2008; Bass, 1998). The banking industry, being highly regulated, calls for leaders to be ethical. This is also supported by the Project Management Institute Code of Ethics and Professional Conduct (Project Management Institute, 2013), which requires PMs to work ethically and professionally, requiring PMs to exhibit EL. Yukl (2010) stated that there is no one best way of leadership as it depends

on context indicating that a combination of relevant leadership styles is to be applied to be considered effective. Kumar and Provodnikova (2021) are of the view that a combination of key leadership styles, depending on needs and situation, leads to effective results. Furthermore, the PMBOK Guide (Project Management Institute, 2021) elaborates that project leadership styles are also tailored to meet the needs of the project, environment, and stakeholders, combining elements of various leadership styles.

Minder (2020) emphasized the need to combine elements of several leadership styles for the effective collaboration of hybrid teams. Lee (2014) as cited in Minder (2020) stressed the need to combine elements of TFL and TSL for hybrid environments and is supported by Purvanova and Bono (2009). Zhu *et al.* (2019) opined that in the current digital age AL, EL, TSL, and TFL may each play a role to some extent and display some overlap. The work of other authors (Zhu *et al.*, 2019; Günzel-Jensen *et al.*, 2018) suggest these four leadership styles may be used holistically for effective project leadership, as there is also a case where some leadership styles co-exist and overlap (Zhu *et al.*, 2019; Günzel-Jensen *et al.*, 2018; Avolio and Gardner, 2005; Avolio *et al.*, 1999; Burns, 1978).

Referring to the current project context in a hybrid environment, Prince (2018) is of the view that digital-age leadership approaches may overlap as these leadership styles can operate in a multi-dimensional space. This view is also echoed by George (2018) who suggests that digital leaders are likely self-organized leaders, adopting people-first principles, engaging with trust and collaboration, and deploying innovative situational leadership. George (2018) hence suggests the current leadership approach is a combination of elements of multiple leadership styles. Günzel-Jensen *et al.* (2018) suggest that digital leadership links TSL, TFL, and empowering AL, with innovative behavior.

The results indicating the factors of each leadership style loading into various components also demonstrate the multi-dimensionality of each leadership style examined. These findings align with the studies of others. The study by Northouse (2016) and Gardner *et al.* (2005) found that AL can be summarized as a collection of four components such as; self-awareness, internalized moral perspectives, balanced processing, and relational transparency. Kalshoven and Hartog (2009) and Kalshoven *et al.* (2011) found three distinct dimensions of the construct for EL, namely; fairness, power sharing; and role clarification. TSL broadly shows two factors: contingent rewards, and management by exception-active (Northouse, 2016). TFL can be broadly categorized into five factors: idealized influence (attributes), idealized influence (behavior), inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2016). The results discussed above supported accepting the alternative hypothesis H_{a2A} and also aligned with the existing literature.

5.3.2 Factors Impacting Leadership Styles

The ANOVA results on the effect of the project teams' characteristics of gender, age, education, experience in projects, project types, and degree of virtuality on the application of various leadership styles showed that experience working on projects had a significant impact on EL in hybrid projects in the Australian banking industry. The results thus supported accepting the alternative hypothesis H_{a2B}. The results also indicated approaching acceptable significant effect of experience working on projects on AL and TFL, and the effect of the type of projects on TFL. The results suggest that PMs' leadership styles are relatively stable across different demographics in the hybrid project contexts in the Australian banking industry. Individual personality traits and organizational culture may influence PM's leadership styles more than the demographic factors of the team or the type of the project. This aligns with some leadership theories

that emphasize the inherent qualities of leaders rather than situational factors (Bass & Avolio, 1994).

The ANOVA result indicated that experience in projects significantly impacted EL. This finding suggests that more experienced PMs are more likely to demonstrate Ethical leadership behaviors. This also indicates that PMs behave more ethically with more experienced project team members. Experienced PMs might have encountered a wider range of ethical dilemmas and have developed a stronger sense of ethical conduct. Experience leads to better judgment and a deeper understanding of the importance of EL in projects. Ethical considerations are honed over time. This can be crucial for complex decision-making and maintaining integrity in projects. This finding aligns with the Contingency and Situational Leadership Theory and Leader-Member Exchange Theory, which suggest that leaders adapt their style based on their experience and the dynamics of their team relationships (Hersey *et al.*, 2001; Graen and Uhl-Bien, 1995).

The results also indicated an insignificant effect of gender, age, and education of project team members and PMs on the PM's leadership style. The reason could be industry-specific. Leadership capabilities and styles may transcend gender differences, especially in professional and highly regulated environments like banking. In such settings, leadership skills and styles are likely developed through experience, training, and organizational culture. Similarly, the effect of age on PM's leadership style may have been insignificant because leadership skills are often developed through a combination of experience, continuous learning, and adaptability rather than age alone. In a dynamic and rapidly evolving industry like banking, the ability to lead effectively may depend more on staying updated with industry trends and technologies rather than on team composition of age (Yukl, 2010). Regarding education, though it provides foundational knowledge, it may not significantly influence leadership style because leadership effectiveness is often

honed through practical experience and personal development (Northouse, 2016). The Australian banking industry emphasizes continuous professional development and on-the-job training to ensure compliance with policies and regulations, ensuring that leadership styles are shaped more by practical experiences than educational background alone (Northouse, 2016).

Regarding the results indicating a statistically not significant effect of the type of project and degree of virtuality on the application of PM's leadership styles, the explanation could again be industry-specific. Project management methodologies and leadership styles in the banking industry are standardized to a large extent, regardless of the type of project. Given the highly regulated and structured nature of banking projects, PMs may adopt similar leadership styles to comply with policies and regulatory requirements, leading to negligible differences based on project type (Kerzner, 2017). The degree of virtuality in hybrid projects might not significantly affect leadership styles because effective project management in virtual environments requires similar leadership qualities to those needed in traditional settings, such as communication, trust-building, and adaptability. Moreover, the Australian banking industry has already adopted robust digital communication and collaboration tools, minimizing the impact of virtuality on leadership styles (Hoch and Kozlowski, 2014).

The findings are in line with the expectations for the banking industry. The Australian banking industry, known for its regulatory rigor and high standards, requires consistent leadership qualities that are not easily influenced by demographic variables. This stability suggests that effective leadership in this sector is more likely to be a function of intrinsic leadership qualities and well-defined organizational cultures. Given the highly regulated nature of the banking sector, EL becomes crucial for compliance and maintaining public trust. The finding that project experience significantly impacts Ethical

leadership underscores the value of seasoned PMs who can navigate complex ethical landscapes.

The results align with the findings of Girardi and Rubim Sarate (2023) on a Brazilian financial institution about Transformational leadership, who found that the perception of TFL does not vary according to variables like age, gender, function, and work unit. Girardi and Rubim Sarate (2023) concluded that TFL seems to infuse the entire organization; it is intrinsic and persistent through organizational culture. Müller and Turner (2007a) and Müller and Turner (2007b) also believe that the cultural climate, diversity within the group, the industry in which the project operates, and team experience can influence the effectiveness of a particular leadership style.

The view in the PMBOK Guide (Project Management Institute, 2021) aligns with the other literature which suggests leadership effectiveness to be a function of at least three sets of variables namely, leadership style, the situation, and the characteristics of the followers. According to Bass and Avolio (1997), effective leaders adapt their leadership style based on the nature of the group, the situation, the objectives to be achieved, and the maturity of the team members. The Contingency and Situational Leadership Theories assume that the effectiveness of leadership behaviors depends on the context and situational factors such as task and organizational conditions (Nauman and Khan, 2006; House, 1971). The findings partially align with the result of these research as they talk about adapting the leadership style based on the context, the industry, organizational culture, maturity of the team members, and experience working on projects. The findings of Project Management Institute (2021) and Bass and Avolio (1997) discussed above, about the characteristics of the followers and the nature of the group, contradict the result of this research. The explanation is covered further below in this section.

According to Littman and Littman (2019), the corporate and organizational culture is an important external factor for EL, as the leader and members of an organization are strongly influenced by it. The other external factors impacting EL are government mandates or policies and legal regulations that are considered standard business behavior (Littman and Littman, 2019). Hence, EL is mostly prevalent and effective in the banking industry.

The research findings contradict some of the previous studies. Some researchers argued about the link between leadership styles and types of projects. A study of leadership styles by Keegan and Den Hartog (2004) identified a preference for TSL among PMs in general. This was supported by the research of other authors too, where their findings indicate that PMs tend to use TSL in simpler projects, while TFL is practiced for more complex projects (Müller *et al.*, 2018; Ding *et al.*, 2017; Turner and Müller, 2006; Jaskyte, 2004). Müller and Turner (2007a), in their impressive research, investigated the correlation between a PM's leadership style and project type and found that different project types require different leadership styles. The reason for this contradiction could be the industry in which the research was conducted. None of the above studies were in the banking industry. The Australian banking industry requires projects to follow consistent project management practices and leadership strategies to ensure adherence to policies and regulatory requirements, explaining the non-variance in the application of leadership styles.

5.4 Discussion of Research Question Three

RQ3 - How does the Project Manager's leadership style impact project performance/success in a hybrid environment?

Five alternative sub-hypotheses (H_a3.1, H_a3.2, H_a3.3, H_a3.4, and H_a3.5) were formulated to examine the effect of AL, EL, TSL, TFL, and combined LS on PP of the

hybrid project team in the Australian banking industry. The results of correlation analysis and regression analyses supported accepting the alternative hypotheses. The results suggested that AL, EL, TSL, TFL, and overall combined LS of the four examined leadership styles are all effective leadership styles of the PMs in driving project success. The findings indicated the crucial role of PM's leadership in influencing project outcomes in the Australian banking industry. These results suggest that EL had the strongest impact on PP, followed closely by AL and TFL. TSL, while still significant, showed a relatively weaker relation. This indicates that leadership styles emphasizing integrity, transparency, and motivation are more effective in the hybrid project teams in Australian banks.

The result of a simple linear regression analysis of individual leadership styles AL, EL, TSL, and TFL aligned with the results of correlation analysis. The results indicated that all four leadership styles had a significant positive impact on the PP in the Australian banking industry. EL had the highest explanatory power, followed closely by AL and TFL. TSL, while significant, had a relatively lower impact on the variance of PP.

The results of multiple regression analysis, with four leadership styles included in the same model, suggested that multiple leadership styles collectively impacted PP. With a moderate coefficient of determination value, the combined leadership style model explained approximately half of the variability in the PP, indicating a moderate explanatory power and is effective in predicting the PP. The other half of the variability is not explained by the combined leadership model, which could be due to other factors not included in this model or to inherent randomness. While the combined leadership model had a moderate level of exploratory power, EL stood out as particularly influential when considering individual contributions.

This aligns with the importance of ethical conduct and decision-making in the banking sector, where trust and compliance are paramount. Ethical PMs not only drive better project outcomes but also ensure adherence to regulatory standards and build trust within the team and with stakeholders (Brown and Treviño, 2006; Brown *et al.*, 2005). AL and TFL are effective in fostering a positive work environment, promoting employee engagement, and driving change (Avolio and Gardner, 2005; Bass and Avolio, 1995) – all critical in a dynamic and highly regulated banking industry. The effectiveness of these leadership styles in a hybrid work environment suggests that PMs need to be adaptable, transparent, and motivational to manage the complexities and unique challenges posed by the hybrid work model.

These results align with several key leadership theories, which provide a framework to understand why certain leadership styles are effective in enhancing PP, especially in the hybrid teams in the Australian banking industry. Authentic Leadership Theory emphasizes the role of genuineness and transparency in leadership, which correlates strongly with PP in this study (Avolio and Gardner, 2005). Ethical Leadership Theory is supported by the findings, highlighting the importance of ethical conduct in achieving project success (Brown and Treviño, 2006). Transactional Leadership Theory suggests that a structured reward system and clear process also play a role in project outcomes (Bass, 1985). Transformational Leadership Theory suggests that leaders who inspire and motivate their followers can significantly improve performance (Bass and Avolio, 1995).

The results also align with the previous studies on the leadership domain which claim that an appropriate leadership style can influence project success (Jiang, 2014) and better performance (Turner and Müller, 2005; Podsakoff *et al.*, 1990). Yang *et al.* (2011) designed a comprehensive research model on leadership, which explained the influence

of leadership on project success. A study by Jiang (2014) also found that leadership influences the performance of projects either in a direct way by leading to project success with corresponding competencies of PMs or in an indirect way by improving teamwork, which can help deliver successful projects. Aligning with this view, Müller and Turner, (2007a), while investigating the correlation between a PM's leadership style and project type, found that the PM's leadership style can influence project outcomes and project success. Müller and Turner (2010a) and Müller and Turner (2007b) further explored this knowledge area to claim that PMs' leadership style affects project success.

A study by Bhatti *et al.* (2021) claim that EL is positively and indirectly related to project success through leader trust and knowledge sharing. Walumbwa *et al.* (2011) and Walumbwa *et al.* (2008) believe that AL has positive and significant effects on employees as well as on organizational performance, which implies that when used in a project context, AL shall also have a positive effect on PP. Bass *et al.* (2003) found that TSL contributes to effective leadership and is essential to successful performance. Ling *et al.* (2008) concluded that CEOs exhibiting TFL had a significant positive effect on the performance of small-to-medium-sized firms.

Most of the researchers have focused their inquiry on the effect of TFL (Avolio *et al.*, 1999) and TSL on project success (Ding *et al.*, 2017; Yang *et al.*, 2011). Some studies (Yang *et al.*, 2011; Keegan and Den Hartog, 2004) found no clear relationship between a PM and project success but indicated that the PM needs to exhibit more TFL than TSL. While some recent literature does touch on value-based leadership, no significant study has been conducted on the effect of a PM's EL and AL on hybrid project outcomes. The findings have thus addressed the gap in the literature through empirical study.

5.5 Discussion of Research Question Four

RQ4 - How does the Project Manager's leadership style impact the quality of the relationship between the Project Manager and the project team members (LMX) in a hybrid environment?

Five alternative sub-hypotheses ($H_{a4.1}$, $H_{a4.2}$, $H_{a4.3}$, $H_{a4.4}$, and $H_{a4.5}$) were formulated to examine the effect of AL, EL, TSL, TFL, and combined LS as a unit on LMX between the PMs and hybrid project team members in the Australian banking industry. The results of correlation analysis and regression analyses supported accepting the alternative hypotheses. The findings suggested that AL, EL, TSL, TFL, and overall combined LS of the four leadership styles studied are all effective for the PMs in enhancing high-quality exchange relationships with the hybrid team members. However, TSL is not as effective as the other three leadership styles when assessed independently. The findings provide insightful evidence on how various leadership styles of PMs impact LMX in hybrid projects within the Australian banking industry.

The correlation and regression results indicated strong positive relationships between the four examined leadership styles and LMX. AL, EL, and TFL exhibited particularly strong correlations with LMX. This suggested that PMs who prioritize authenticity, ethical standards, and transformational behaviors are more likely to cultivate high-quality LMX, characterized by mutual trust, respect, and obligation (Graen and Uhl-Bien, 1995). The results of simple linear regression of AL, EL, TSL, and TFL independently on PP indicated that all four leadership styles positively and significantly impacted LMX in the Australian banking industry. The results suggested that TFL had the highest explanatory power followed by AL and EL, while TSL indicated comparatively lower explanatory power and impact on the variance of PP. These results aligned with the results of the correlation analysis.

The multiple regression analysis further clarified these relationships. The results of the combined leadership style model, which included AL, EL, TSL, and TFL, indicated that PMs often employ a blend of leadership styles to enhance their interactions with team members. With a high coefficient of determination value, the combined leadership style model explained a substantial portion of the variance in the LMX. This indicates that the combined leadership style model has strong explanatory power and is effective in predicting the LMX. Nearly three-quarters of the variability in the LMX could be accounted for by the combined leadership style model, leaving a quarter of the variance unexplained, which could be due to other factors not included in this model.

When taken individually, TFL emerged as a significant predictor of LMX, highlighting its critical role in hybrid project environments where motivating and inspiring team members is crucial for success (Bass and Avolio, 1995). However, the impact of AL, EL, and TSL, while positively correlated with LMX, was not significant, when regressed in a combined leadership model. This could suggest that while these leadership styles are important in building high-quality exchange relationships, their direct influence on LMX may be mediated by other factors or leadership styles within the hybrid work context. Supporting this notion, the effect of combined LS was significant on LMX.

The hybrid work environment presents unique challenges in the Australian banking industry context that require adaptable and multifaceted leadership approaches. TFL, with its emphasis on vision, inspiration, and individualized consideration, appears particularly effective in navigating these challenges and fostering strong LMX (Bass and Avolio, 1995; Bass, 1985). The significant relationship between combined LS and LMX also suggests that PMs who can integrate various leadership styles, such as authenticity, ethical conduct, and transactional clarity, are better positioned to build robust LMX. This

adaptability is crucial in the dynamic and regulatory-intensive environment of banking, where both relational and compliance-driven leadership are essential (Brown and Treviño, 2006; Avolio and Gardner, 2005).

The results of this study are closely aligned with several well-established leadership theories. Transformational Leadership Theory states that transformational leaders inspire and motivate followers to achieve higher levels of performance by creating a vision, fostering an inclusive culture, and addressing individual team members' needs (Bass and Avolio, 1995; Bass, 1985). This explains why PMs who exhibit TFL are effective in hybrid environments. Transformational PMs are adept at navigating the complexities of hybrid work by fostering strong relational bonds and motivating employees.

The results indicated that AL and EL had a positive impact on LMX, highlighting the importance of transparency, ethical behavior, and genuine interactions in building a strong LMX. The results thus align with Authentic Leadership Theory, which emphasizes the leader's self-awareness, relational transparency, and ethical conduct (Avolio and Gardner, 2005) promoting high-quality exchange relationships. In hybrid environments, where face-to-face interactions are limited, AL can help build trust and credibility, essential for effective LMX. The results also indicate that ethical conduct by PMs develops trust and an ethical climate, which helps improve team performance and relationships. Ethical Leadership Theory posits that ethical leaders demonstrate normatively appropriate conduct through personal actions and interpersonal relationships (Brown and Treviño, 2006). Referring to the Australian banking industry, where regulatory compliance and ethical behavior are paramount, EL helps navigate the complexities and build a culture of integrity and accountability.

The results also align with the Leader-Member Exchange Theory. High-quality LMX is associated with better communication, trust, and job satisfaction (Graen and Uhl-Bien, 1995), which are crucial in hybrid project settings. LMX theory posits that leaders develop unique relationships with each team member, which can range from high-quality (characterized by mutual trust and respect) to low-quality exchanges (Graen and Uhl-Bien, 1995). The findings suggest that TFL, AL, and EL are particularly effective in fostering high-quality LMX.

The results also align with the previous studies. Jawadi *et al.* (2013) opined that relationship qualities like respect, mutuality, and cooperation are the characteristics of high-quality exchanges that positively influence team outcomes. The findings from the study conducted by Jawadi *et al.* (2013) show that e-leaders, acting as mentors and facilitators positively influence exchanges between their team members. Based on the research of Graen and Uhl-Bien (1995), effective leadership transpires when leaders and followers develop and maintain high-quality exchange relationships and LMX can be Transactional and Transformational. High-quality LMX contributes to leadership effectiveness (Kawaguchi *et al.*, 2021) and team effectiveness through access to information and support across the organization (Druskat and Wheeler, 2003), characterized by mutual trust (Dulebohn *et al.*, 2012).

The results also align with the notion of ‘in-group’ and ‘out-group’ in the LMX context. Manzoni and Barsoux (1998) stated that up to 90% of managers treat their team members as members of either an ‘in-group’ or ‘out-group’. The ‘in-group’ has stronger relationships with the leader. By contrast, the ‘out-group’ experiences weaker relationships with the leader, and consequently attracts fewer valued resources from their leader (Graen and Uhl-Bien, 1995), and are managed more formally through a transactional relationship of rules and policies (Manzoni and Barsoux, 1998). This can

explain why TSL, though has a positive impact on LMX, is weaker in effect than the other examined leadership styles.

5.6 Discussion of Research Question Five

RQ5 - How does the quality of the relationship between the Project Manager and hybrid project team members (LMX) impact the project performance?

Two alternative hypotheses (H_a5A and H_a5B) were formulated to empirically examine the impact of LMX between the PM and hybrid project team members on the PP in the Australian banking industry. H_a5A was formulated to evaluate how LMX impacted PP directly. H_a5B was formulated to examine whether LMX mediated the relationship between PM's leadership styles and PP in the Australian banking industry.

5.6.1 LMX and Project Performance

The correlation and regression analysis results between LMX and PP indicated that LMX positively impacted PP significantly, enhancing PP in hybrid settings. The results supported accepting the alternative hypothesis H_a5A. This finding suggests that higher-quality LMX, featured by mutual trust, respect, and obligation, contributes substantially to improved project outcomes. The regression analysis further reinforced this relationship, indicating that LMX is a significant predictor of PP. With a moderate coefficient of determination value, the LMX showed moderate explanatory power over PP, explaining a substantial, but not overwhelming, portion of the variance in PP. While there is significant unexplained variability, the model still provided meaningful insights and can be valuable in understanding and predicting the PP. These results align with the Leader-Member Exchange Theory, which posits that leaders develop unique dyadic relationships with each follower (Graen and Uhl-Bien, 1995). High-quality LMX relationships are associated with better communication, higher levels of support, and

greater job satisfaction, all of which are crucial for achieving high project performance (Graen and Uhl-Bien, 1995), especially in hybrid work environments.

In the context of Australian banks, where hybrid work arrangements are becoming increasingly common, the quality of LMX has a crucial role in maintaining effective communication and team cohesion. Hybrid project teams, face unique challenges such as maintaining engagement, ensuring effective communication, and building trust across distances. High-quality LMX relationships can mitigate these challenges by fostering a sense of belonging and commitment within project team members, thereby improving overall PP.

The results align with previous studies. Research on LMX suggests substantial links with many work outcomes. LMX is positively related to satisfaction with supervision (Schriesheim and Gardiner, 1992), supervisory ratings of job performance (Graen *et al.*, 1982), and satisfaction with work (Vecchio and Gobdel, 1984). The LMX Theory has demonstrated that trust plays a pivotal role in building relationships between the PM and project team members, with high-quality relationships motivating team members and guiding their attitudes and behaviors (Wood, 1989; Ames and Archer, 1988). This will, in turn, influence desired outcomes such as satisfaction, commitment, and performance (Murayama and Elliot, 2012; Costigan *et al.*, 2007; Dirks, 1999). The quality of this relationship has implications for the team's productivity and well-being in their jobs (Van Breukelen *et al.*, 2006), which will result in enhanced project performance. Wiatr and Skowron-Mielnik (2023) emphasize the importance of relationships in the current environment. The quality of the relationship between the leader and hybrid team members is the primary driver of engagement, and thus performance, hence LMX is particularly important in building belonging and unity in the hybrid environment (Wiatr and Skowron-Mielnik, 2023).

Contrary to the positive findings of this study, Lee (2021) argues that the LMX model often results in tension and conflict within teams, leading to a negative and unproductive work environment. Aligning with this view, Whipple (2010) also suggests that playing favorites can have a detrimental effect on teams. Leaders who practice favoritism obstruct the opportunity for trust-building (Whipple, 2010). Trust is critical to the success of hybrid projects (Whipple, 2010). This discrepancy can be addressed by considering the specific context and implementation of LMX within hybrid project teams in the Australian banking industry. The flexibility and autonomy provided by hybrid work can reduce the apparent favoritism and inequality that sometimes arise in LMX relationships. The structured and regulated nature of the banking industry may provide a conducive environment for effective LMX implementation, minimizing conflict and fostering collaboration.

5.6.2 LMX as a Mediator between Leadership Styles and Project Performance

The regression approach suggested by Baron and Kenny, (1986) was used to test the mediating effect of LMX on the relationship between combined LS (a combination of AL, EL, TSL, and TFL) and PP. The results of the four regression analyses conducted indicated that LMX partially mediated this relationship. The result was evidenced by a significant drop in the effect of combined LS on PP after including LMX in the model. The results supported accepting the alternative hypothesis H_{a5B} within hybrid project teams in Australian banks. Although the effect of combined LS on PP was reduced when controlling for LMX, it remained significant, indicating that LMX accounts for some but not all of the influence of combined LS on PP. The other factors alongside LMX also play a part in the association between combined LS and PP in the hybrid project context. However, a portion of the impact of combined LS on PP operates through LMX.

The partially mediating role of LMX suggests that while leadership styles directly impact PP, the quality of exchange relationships also plays a crucial part. LMX enhances the understanding and communication between PMs and hybrid project team members, which can lead to improved PP. This mediating effect underscores the importance of fostering high-quality exchanges between PMs and the project team members to achieve better project outcomes. High-quality exchange relationships featured by mutual respect, trust, and support are vital in hybrid work environments where direct supervision is limited.

The factors relating to the hybrid environment and banking industry can enhance the role of LMX. The hybrid work model in the Australian banking industry requires PMs to maintain a combination of strong virtual and face-to-face relationships. LMX facilitates effective communication, trust, and collaboration, mitigating challenges associated with remote work. High-quality LMX ensures that hybrid project team members feel valued and supported, enhancing their engagement and commitment to project goals despite physical distance. The Australian banking industry is highly regulated and dynamic, requiring adaptive and responsive leadership. LMX helps navigate these challenges by fostering a supportive environment where hybrid project team members likely contribute to innovative solutions and adapt to regulatory changes. The findings of this study suggest that high-quality LMX relationships can mitigate these challenges by fostering a sense of belonging and commitment. Specifically, the effective application of AL, EL, and TFL can enhance LMX quality, thereby enhancing PP.

The findings align with several leadership theories. Leader-Member Exchange Theory posits that leaders develop distinct relationships with each team member, which can influence performance outcomes (Graen and Uhl-Bien, 1995). High-quality LMX relationships, characterized by trust and mutual respect (Graen and Uhl-Bien, 1995), are

shown to significantly enhance PP in hybrid teams. Transformational Leadership Theory states that transformational leaders inspire and motivate team members (Bass & Avolio, 1994), which is positively associated with high-quality LMX relationships. This relationship, in turn, boosts project performance by fostering an environment of trust and engagement (Bass & Avolio, 1994). Authentic leaders, who are genuine and transparent, contribute to building strong LMX relationships (Avolio and Gardner, 2005). Authenticity promotes trust and integrity, which are crucial for effective collaboration in hybrid project settings in driving performance. Ethical leadership involves leading by example and maintaining high ethical standards (Brown and Treviño, 2006). The significant impact of EL on both LMX and PP, along with its direct and indirect impact through mediation by LMX, underscores its importance in creating a trustworthy and high-performing project environment in regulated industries like banking.

This study aligns with the other studies in trying to identify the mediating factor between leadership style and project success. Yang *et al.* (2011) designed a comprehensive research model on leadership, which helps to understand the relationship between leadership, teamwork, project success, and project type. Yang *et al.* (2011) found that leadership influences project success through teamwork. A study by Jiang (2014) also found that leadership influences the performance of projects either in a direct way by leading to project success with corresponding competencies of PMs or in an indirect way by improving teamwork, which can help deliver successful projects. Müller and Turner, (2007a) investigated the relation between a PM's leadership style and project type and found that the PM's leadership style can influence project outcomes with project type as a mediator. Literature studying the association of leadership styles and LMX is scarce, and LMX as a mediator has not been widely studied. Hence, the research addressed this literature gap through empirical study.

Contrary to the positive findings of this study, Lee (2021) and Whipple (2010) suggest that LMX can lead to tension and conflict within teams, creating a negative work environment, and can have detrimental effects on teams. This discrepancy can be attributed to differences in context and implementation. In the Australian banking industry, PMs employ inclusive and supportive leadership practices through AL, EL, and TFL that mitigate potential negative effects of LMX, thereby enhancing team cohesion and PP.

The research validates that LMX partially mediates the association of PMs' leadership styles with PP in hybrid project teams within the Australian banking industry. The findings align with LMX, Transformational, Authentic, and Ethical Leadership Theories, highlighting the importance of high-quality LMX in achieving optimal project outcomes. The results emphasize the need for fostering strong, trust-based relationships with team members to navigate the complexities of hybrid work environments effectively in the Australian banking industry.

5.7 Conclusion

This chapter provided the interpretation and explanation of the results reported in Chapter IV. The results of the hypotheses testing through descriptive statistics, EFA, correlation analysis, and regression analysis of various dependent and independent variables supported rejecting the null hypotheses. The study answered the five research questions successfully and validated the Project Leadership Research Model (Figure 3.1). The results aligned with the existing literature and expected outcomes for the banking industry in Australia. The Project Leadership Model for Hybrid Teams (Figure 5.1) below shows the results of the statistical testing of the hypotheses.

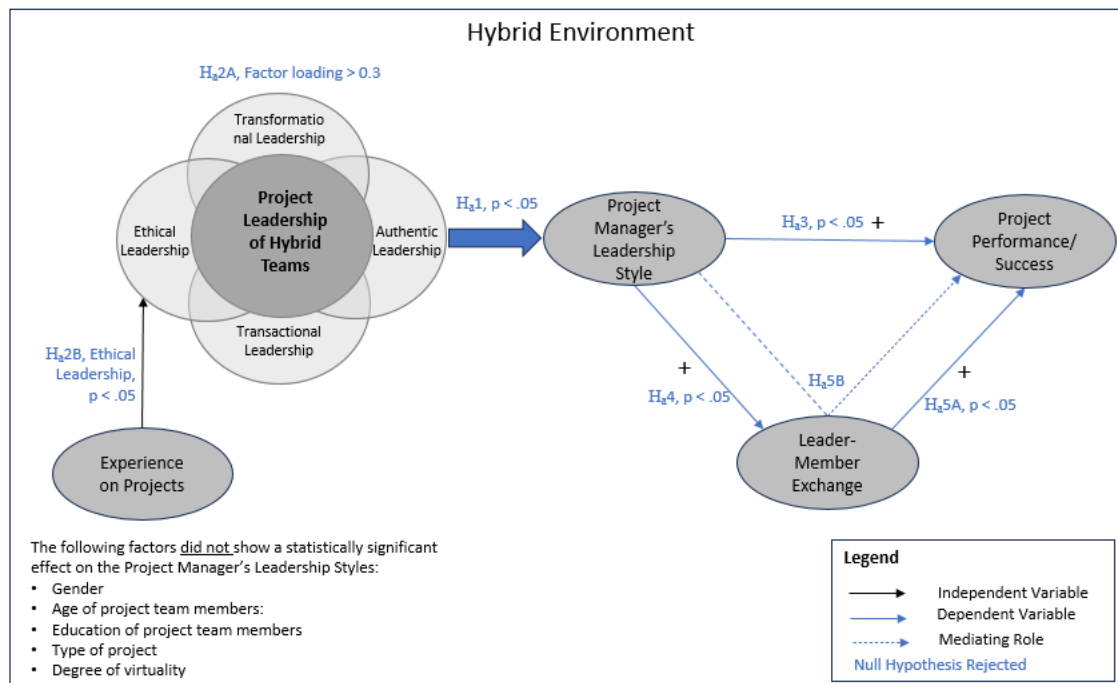


Figure 5.1
Project Leadership Model for Hybrid Teams

The findings indicated that AL, EL, TSL, and TFL were the effective project leadership styles used by PMs to lead hybrid project teams in Australian banks. The results showed an overlap of these four leadership styles indicating that PMs use a combination of these leadership styles at varying degrees to lead the hybrid teams. The results indicated that the project team characteristics, project type, and degree of virtuality had statistically not significant influence on the PM's leadership styles. However, the hybrid team member's experience working on the projects had a moderately significant impact on the PM's leadership style. The findings align with the expectations of outcome from the Australian banking industry which is highly regulated and would need a stable and consistent leadership approach to ensure compliance with regulations and policies. Leadership effectiveness in the banking industry is more closely

related to individual competencies, organizational culture, and the ability to adapt to industry-specific demands.

The leadership styles examined in this research were found to be effective, as they had a significant positive impact on both PP and LMX between PMs and hybrid project team members. PMs who exhibited higher levels of these leadership styles influenced LMX by fostering high-quality relationships with their team members and driving favorable project outcomes. The research also empirically investigated the effect of LMX on PP and the relationship between PM's leadership styles and PP. The findings indicated that LMX had a positive significant impact on PP. Moreover, LMX partially mediated the relationship between the PM's combined LS and PP, concluding that the PM's leadership style directly impacts PP and indirectly influences PP through an enhanced LMX relationship.

CHAPTER VI:
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

6.1 Summary

This research investigated the effective project leadership styles of PMs for hybrid project teams in the Australian banking industry. The main purpose of the research was to validate that the effective project leadership of hybrid project teams is a multi-dimensional leadership model with a combination of AL, EL, TSL, and TFL at varying degrees. The research had multiple objectives to meet the purpose such as to examine the leadership styles prevalent in the projects space in the banking industry in Australia and to identify the effective project leadership styles to lead the hybrid project teams. The research interrogated ways to measure the effectiveness of the project leadership styles through the literature review. Project leadership effectiveness for this research was measured through the impact of PM's leadership styles on project performance.

An extensive literature review was carried out to identify the gaps to agree on the boundaries and scope of this research. While some recent literature does touch on value-based leadership, no significant research has been conducted on the effect of a PM's EL and AL on hybrid project outcomes. TSL and TFL have been widely studied, however, literature on these leadership styles was scarce in the Australian banks and hybrid work environment context. Empirical research on the overlap of PM's leadership styles was also very limited. This research is deemed relevant in the current context as it focuses on addressing the literature gaps by conducting empirical research on PM's leadership style in the Australian banking industry.

A quantitative methodology was used to statistically test the hypotheses formulated after an extensive literature review in the leadership, project, and hybrid work model domain. Data was collected through an online Google Forms survey adapted from

a collection of existing validated and reliable instruments. Descriptive and inferential statistics like means, correlation, EFA, ANOVA, and simple and multiple regression analyses were used to analyze the data collected. The sample consisted of PMs, project team members, and project stakeholders who had worked on a project, which is now completed, in the hybrid work environment in the Australian banks.

This research examined the relationship between each leadership style, namely AL, EL, TSL, and TFL, and LMX and PP, specifically emphasizing the mediating role of LMX. The research also examined the impact of a combined leadership model of these four leadership styles, as combined LS, on the LMX and PP. This was done to assess the impact of each leadership style individually and the effect of a combined leadership style as a unit. The key findings of this research indicated that all four examined leadership styles, including a combination of these leadership styles, showed a significant positive impact on PP, with EL and AL showing a profound effect, followed closely by TFL. Australian banks can significantly improve their project outcomes by fostering these leadership qualities, driving overall success and competitiveness. These leadership styles also showed a significant positive impact on LMX between the PMs and hybrid project team members. TFL showed the strongest positive effect on LMX.

While TSL has its merits, particularly in structured and routine tasks, its moderate correlation with PP and LMX suggests that TSL should be complemented with other leadership styles (AL, EL, and TFL) to maximize effectiveness. The other three leadership styles demonstrated a strong positive significant effect. The results also highlighted the critical role of LMX in enhancing PP within the hybrid project teams. LMX positively impacted PP, indicating that high-quality exchanges between the PMs and the hybrid project team members enhanced project performance and outcomes. The results indicated that LMX partially mediated the relationship between the combined

leadership styles and PP. This suggested that while PM's leadership styles directly enhanced PP, their effectiveness is significantly amplified through high-quality LMX.

Contrary to the existing literature, the research also showed several statistically not significant results. The research results indicated that gender, age, type of projects, education, and degree of virtuality had no significant effects on PM's leadership styles. Only experience in projects showed a significant impact on the adoption of EL by PMs. This suggests that while leadership styles among PMs in the Australian banking industry are generally stable across various demographic and project-related factors, experience in projects significantly enhances EL. This highlights the critical role of experience in fostering ethical judgment and leadership in banking, where compliance and ethical conduct are paramount. The explanation for this inconsistency could be that the Australian banking industry has stringent policies and regulations to adhere to due to being part of a highly regulated industry. In such an industry, leadership effectiveness is more closely related to individual competencies, organizational culture, and the ability to adapt to industry-specific demands.

Ethical conduct and regulatory compliance are the key priorities in the banking industry. The focus on moral conduct in the Australian banking industry has become even more paramount since the Royal Commission into Misconduct in the Banking, Superannuation, and Financial Services Industry was established by the Australian government in December 2017 (Hayne, 2019). This is commonly known as the Banking Royal Commission. Its purpose was to investigate and report on misconduct in the banking, superannuation, and financial services sectors (Hayne, 2019). The Banking Royal Commission's work has led to substantial reforms in the Australian banking industry, aiming to create a more ethical and customer-focused sector. This was done through regulatory changes, cultural shifts, and restoring consumer confidence by

addressing systemic issues and promoting better practices (Hayne, 2019). Embedment of these changes would only be possible through effective leadership strategies at every level of the Australian banking industry.

The research validated the multi-dimensional project leadership framework conceptualized in Figure 2.1 and Figure 2.2. This suggests that project leadership of hybrid teams in the Australian banking industry is a mix of four leadership approaches – AL, EL, TSL, and TFL. PMs exhibiting a combination of these four leadership styles at varying degrees, depending on the context and situations, can drive hybrid projects toward successful outcomes. These PMs are deemed effective PMs in the Australian banking industry. Hence, assigning the right PM, with the right leadership style, is key to successful projects (Crawford, 2005).

The results are consistent with the literature review findings and results of previous research. The findings of the research align with multiple leadership theories such as Contingency and Situational Leadership Theory (Bryman, 1993), Leader-Member Exchange Theory (Graen and Uhl-Bien, 1995), Behavioural Theory (Hersey *et al.*, 2001), Authentic Leadership Theory (Avolio and Gardner, 2005), Ethical Leadership Theory (Brown *et al.*, 2005), Transactional Leadership Theory (Bass, 1985), and Transformational Leadership Theory (Bass and Avolio, 1995).

The research results indicated the importance of EL, AL, and TFL demonstrating stronger leadership accountability and ethical conduct by promoting transparency, integrity, and clear vision. These leadership styles effectively foster a positive and ethical organizational culture and are essential for restoring consumer confidence and ensuring compliance with regulatory standards. The research results also indicated that EL and TFL are particularly effective in hybrid environments, promoting trust, engagement, and productivity among team members, which are vital for maintaining high standards and

ethical practices in a dispersed work setting. AL encourages open communication and ethical decision-making (Gardner *et al.*, 2011), crucial for cultural transformation in the banking sector. EL was significantly related to higher PP, emphasizing the importance of ethical conduct and decision-making (Brown and Treviño, 2006). This directly addresses the misconduct issues highlighted by the Banking Royal Commission. TFL was found to have a significant impact on PP in hybrid teams. This aligns with the need for visionary and inspiring leaders who can drive change and motivate employees to adhere to ethical standards and customer-focused practices (Bass & Avolio, 1994). These results also support the way the Australian banking industry has been able to address the issues raised by the Banking Royal Commission through the application of a combination of leadership styles.

The Australian banking industry, characterized by its dynamic and highly regulated environment, requires effective project leadership to navigate challenges and drive project success. The leadership styles highlighted in this study, AL, EL, TSL, and TFL, offer various advantages that are particularly relevant to this industry. The effectiveness of these four leadership styles can be linked to their ability to foster trust, ensure regulatory compliance, inspire innovation, and maintain operational efficiency. In a hybrid work environment, the effectiveness of these leadership styles lies in their ability to foster trust, maintain ethical standards, inspire innovation, and ensure accountability. By integrating these leadership styles, banks can navigate the challenges of the industry and the complexities of hybrid work and drive successful project outcomes. This can be done by ensuring all hybrid project team members are engaged, motivated, and aligned with the bank's strategic goals, regardless of their physical location.

In the banking industry, effective PMs should therefore develop various leadership styles, and effectively apply the appropriate style to specific situations and

contexts (Velu *et al.*, 2017; Liphadzi *et al.*, 2015). PM exhibiting a single leadership style will only achieve success in situations that specifically require that particular style (Liphadzi *et al.*, 2015). However, PMs demonstrating a combination of AL, EL, TSL, and TFL will likely lead the project toward success in the Australian banking industry. This can be attributed to the dynamic and highly regulated nature of the banking industry where ethics and compliance outweigh others, and the importance of authenticity, adaptiveness, and vision, which are key for success in the hybrid environment.

6.2 Implications

This research empirically supports the theory that a PM's leadership style significantly impacts the project outcome. The results underscore the significance of exhibiting leadership behaviors that emphasize ethical behavior, authenticity, and transformation. The integrated multi-dimensional project leadership model conceptualized in this research validates the existing theories and provides actionable insights for leadership development in practice.

6.2.1 Practical Implications

Leadership Development Programs: Banks in Australia should prioritize leadership development programs focusing on authentic, ethical, and transformational leadership qualities, equipping them with the skills to manage hybrid teams effectively. These leadership styles are effective in fostering high-quality leader-member exchanges, which in turn can improve project performance. Training programs should focus on enhancing PMs' self-awareness, ethical decision-making, and ability to inspire and intellectually stimulate their project teams, to enhance team dynamics and overall project success. Training programs should also include components that enhance the ability to build strong leader-member exchanges, such as communication, empathy, and trust-building. Senior leaders and managers of the PMs need to be aware of effective

leadership styles and develop PMs with appropriate styles for their projects. The need for targeted leadership development programs that focus on ethical leadership is especially pertinent in the Australian banking industry, where ethical lapses can have severe consequences, including financial penalties and loss of consumer trust.

Robust Training Programs: Banks should implement robust training programs that enhance ethical decision-making, leadership, and knowledge about regulatory requirements. This could include scenario-based training, mentorship programs with experienced leaders, and regular workshops on emerging ethical issues in banking and changing regulatory requirements.

Balanced Leadership Approach: While TSL has its place in maintaining order, ensuring efficiency and compliance, and providing clear expectations, it should be complemented by the other three leadership styles (AL, EL, and TFL) to achieve the best project outcomes. Integrating Transactional with Authentic, Ethical, and Transformational leadership styles can provide a comprehensive approach to project leadership, addressing both routine operations and strategic initiatives.

Policy Implementation: Implementing people policies that promote continuous professional development can help in nurturing effective leadership qualities across all demographic groups. Banks should also encourage the adoption of policies that promote ethical behavior and transparency at all levels.

Culture of Trust and Innovation: Promoting a leadership culture that values trust, ethics, and innovation can enhance team engagement, customer satisfaction, and overall project performance, ensuring long-term success in the competitive banking sector.

Uniform Standard of Leadership Quality: Banks in Australia may benefit from focusing on core leadership traits and behaviors (as the research results suggest) that

align with their strategic goals and regulatory requirements, rather than attempting to tailor leadership development to various demographic characteristics. This ensures a uniform standard of leadership quality across the industry.

Development and Retention of Experienced PMs: Experienced PMs are likely better equipped to handle ethical dilemmas and maintain integrity, which is vital for the reputation and regulatory compliance of banks. Hence, banks should prioritize the development and retention of experienced PMs who can model ethical behavior and decision-making.

Hybrid Work Strategies: Developing strategies that leverage the strengths of hybrid work environments can improve project performance. Effective communication tools and techniques should be integral to these strategies. Implementing robust performance management systems that provide clear expectations, regular feedback, and recognition can help maintain accountability and motivation in a hybrid work setting.

Team Management: PMs should know the significance of fostering high-quality relationships with team members, particularly in hybrid environments. Regular check-ins, transparent communication, and personalized support are critical strategies. Providing continuous feedback and support can help maintain high-quality LMX relationships and address issues promptly, preventing the buildup of negative dynamics within the hybrid project teams.

Communication Strategies: Senior leaders and PMs in banks should adopt communication strategies that ensure transparency, foster trust, and maintain employee engagement, bridging the gap between remote and in-office workers in the hybrid work environment.

6.2.2 Theoretical Implications

Leadership Theories: The findings support the relevance of Authentic Leadership Theory, Ethical Leadership Theory, Transactional Leadership Theory, Transformational Leadership Theory, Behavioral Theory, Contingency and Situational Leadership Theory, and Leader-Member Exchange Theory in the context of hybrid project teams in the Australian banking industry. These theories highlight the importance of flexibility and adaptability of PMs with ethical conduct, authenticity, inspirational motivation, and high-quality leader-member relationships in achieving superior project outcomes.

Project Leadership Model for Hybrid Teams: This research offers a better understanding of the project leadership of hybrid project teams in the highly regulated banking industry. The results suggest that project leadership is a multi-dimensional leadership approach where four key macro leadership styles of AL, EL, TSL, and TFL overlap at varying degrees to deliver successful project outcomes, supported by enhanced LMX.

Cross-Contextual Validity: The study contributes to the cross-contextual validity of these leadership theories by applying them to the project domain in the hybrid work settings of the Australian banking industry.

6.3 Recommendations for Future Research

The study focused on validating the multi-dimensional leadership approach for PMs working in hybrid project teams in the Australian banking industry. This was done by examining the relationship between the relevant leadership styles and PP, and also by inspecting the mediating role of LMX in this relationship. As with any other research, this study had several limitations described in Section 3.10 of Chapter III. These

limitations should be addressed in future research. The findings of this research also highlighted some opportunities for future research.

The study was cross-sectional and quantitative, hence causal relationships between the independent and dependent variables could not be inferred (Bhattacharjee, 2012). Since leadership and relationship building (LMX) is a continuous process, longitudinal studies with both quantitative and qualitative data may provide deeper insights. The longitudinal research design with mixed methodology could demonstrate the evolution of exchange relationships between the PMs and hybrid project teams over time. The qualitative data may explain the associations between variables and the cause-and-effect relationship. It could provide insights and explanations into how leadership styles impact such relationships along with the change in exchange relationship dynamics over various phases of the project. Furthermore, probing other possible mediators and moderators like degree of virtuality and project type, could provide a comprehensive understanding of the association between leadership styles and PP.

The study used the conceptual multi-dimensional project leadership model and its impact on PP to assess leadership effectiveness. It is recommended that future research focus on the interpersonal dyadic relationship between the PM and hybrid project team members and its impact on the team performance. The impact of multi-dimensional leadership style on the overall team performance and the role of LMX in this relationship can be studied.

This research was conducted on hybrid project leadership in Australian banks. This might have limited the generalizability of the results as this only focused on a single industry in one geographic location. A similar study could be conducted on banks in other geographic locations to validate if the multi-dimensional project leadership model conceptualized in this study (combination of AL, EL, TSL, and TFL) is relevant and

effective. This might support generalizing the research findings in the banking industry. Future research could also explore the applicability of the conceptualized multi-dimensional project leadership model in other sectors within the financial services in Australia to generalize the effectiveness of these leadership styles.

This research used a subset of items from the established ALQ (Walumbwa *et al.*, 2008) to measure AL, the instrument developed by Brown *et al.* (2005) to measure EL and items from MLQ (Northouse, 2016) to measure TSL and TFL. Future research may use all the items from the established source instrument. This may further explain the overlap of the project leadership model by justifying the multi-dimensional leadership approach.

This research considered project leadership as vertical leadership with PMs as formal project leaders. Shared and balanced leadership are gaining momentum in the project domain in the Australian banking industry. The project team structure is evolving into a much flatter structure, with a new realm of mutual influence by leading each other in the team with either formal or informal leader (Zhu *et al.*, 2019). Future research could tap into these evolving leadership concepts to examine whether the leadership styles effective in the traditional vertical leadership structure hold their value in the new era.

The research model designed for this study only considered the impact of the PM's leadership styles and LMX on PP. The results indicated that the combined leadership styles and LMX had moderate explanatory power on PP, with the model only explaining the prediction of about half of the variance in PP. While the current model explains a substantial portion of the variance in PP, recognizing and addressing the unexplained variance through additional factors can enhance the explanatory power of PP in the Project Leadership Model for Hybrid Teams. Future research could look into further refinement and inclusion of additional predictors or variables to account for the

remaining unexplained variance and to enhance the predictive power of the model.

Potential unexplained factors could be team dynamics (measured through interpersonal relationships and team cohesion), project characteristics (e.g. complexity, project phase, stakeholder involvement), organizational factors (e.g. culture, structure), external factors (e.g. market conditions, regulatory environment), project team characteristics (e.g. skills, competencies, motivation, experience) and technological factors, to name a few.

Future research could also examine other factors specific to the banking industry that might influence leadership styles, such as the impact of digital transformation, customer expectations, and global financial trends. Understanding these variables can help tailor leadership development programs to better prepare leaders for the unique challenges of the banking sector, such as the increasing importance of digital banking and cybersecurity. The role of organizational culture in shaping leadership styles and their effectiveness in hybrid projects could also be investigated to provide deeper insights into contextual influences.

6.4 Conclusion

Though the medium for implementing leadership goals is different (Trivedi and Desai, 2012) in the current hybrid environment, the fundamentals of leadership have not changed significantly (Avolio and Kahai, 2003) and the goals of leadership remain the same. Leadership, in the hybrid environment, is still a process of interaction between leaders and followers where the leader attempts to influence followers to achieve a common goal (Velu *et al.*, 2017). As such, PMs in the banking industry play multifaceted leadership roles by blending various leadership styles to meet the specific needs of their projects and teams. This blended approach helps them navigate the complexities of project management effectively. They dynamically adapt their leadership style depending on the situational requirements. They do not adhere to a rigid, single-

style approach anymore. By combining different leadership styles, PMs enhance their overall leadership effectiveness. The integration of various styles allows them to be more responsive, versatile, and impactful in leading their hybrid project teams. The combination of leadership styles reflects their need for flexibility, adaptability, and a holistic approach to effectively manage projects and lead their teams.

In the Australian banking industry, PMs are better equipped to handle the multifaceted demands of project management, and ultimately lead to improved project performance by integrating aspects of AL, EL, TSL, and TFL. PMs who adeptly blend these leadership styles are likely to cultivate stronger, more effective relationships with their team members through enhanced LMX, thereby driving project success. By fostering high-quality relationships through trust, respect, and mutual commitment, PMs can significantly improve project outcomes.

The study highlighted the critical role of effective leadership styles, particularly EL, AL, and TFL, in enhancing PP in hybrid project teams within the Australian banking industry. The effectiveness of these leadership styles can be linked to their ability to foster trust, ensure regulatory compliance, inspire innovation, maintain operational efficiency, and ensure accountability. EL was deemed critical for the success of hybrid projects in the banking industry due to the need for ethical conduct and compliance with policies and regulations needed in the highly regulated industry. The partial mediation by LMX emphasized the importance of fostering strong leader-member relationships. These findings contribute to the existing body of knowledge on leadership theories and offer practical recommendations for improving leadership effectiveness in hybrid work environments. Future research should continue to explore these dynamics to further validate and expand upon the insights gained from this study.

APPENDIX A

INVITATION TO PARTICIPATE IN AN ONLINE SURVEY

Dear Participants,

As part of my doctoral studies with the Swiss School of Business and Management (SSBM) Geneva, I am conducting academic research to gain insights into the project leadership styles of Project Managers leading the hybrid project teams in the Australian banking industry. The title of my dissertation is *Effective Project Leadership for Hybrid Teams in the Australian Banking Industry*. This research aims to examine the relationship between the Project Manager's leadership styles, the quality of the relationship between the Project Managers and hybrid project team members, and the performance of the projects.

You are requested to participate in an anonymous one-off online survey that seeks to elicit your thoughts, experiences, and perceptions while being part of a now-completed project run in a hybrid environment in the Australian banking industry. Before agreeing to participate, it is important to understand that your participation in this research is voluntary. You can withdraw at any time during the online survey until you have submitted your responses. There is no financial benefit for participating. There are no known risks related to your participation in this study beyond the inconvenience of time. Confidentiality of your responses and results will be tightly maintained. Only aggregate results will be reported in the thesis. No identifying information will be requested or reported in the research findings. Your responses will greatly contribute to the literature on project leadership, the hybrid work model, and the Australian banking industry.

You can participate in the research by clicking the survey link provided below. You will be directed to a Google Forms survey where you will be asked to acknowledge that you have been provided with information about the research. You will also be requested to provide consent to participate in the research. The online survey has 4 sections consisting of a total of 57 items and should only take approximately 15 minutes to complete. All survey items are multiple-choice. The survey will be open until 31st May 2024.

[Google Forms Survey Link](#)

I would also like to request you to share this email invitation containing the online survey link with your network who meet the below selection criteria:

- a) have been members or stakeholders of a project team working in the hybrid model,
- b) the projects must be in the banking industry in Australia, and
- c) the project must have been completed.

You can learn more about the research and your participation through the attached '*Participant Information Sheet*'. Please feel free to contact me for further information, questions, or concerns.

Your time, insights, participation, and cooperation in the research are highly appreciated.

Sincerely,
Brinda Shrestha
Researcher & Doctoral Candidate
SSBM Geneva
brinda@ssbm.ch

APPENDIX B

INFORMED CONSENT

Dear Participants,

As part of my doctoral studies with the Swiss School of Business and Management ([SSBM](#)) Geneva, I am conducting academic research to gain insights into the project leadership styles of Project Managers leading the hybrid project teams in the Australian banking industry. The title of my dissertation is *Effective Project Leadership for Hybrid Teams in the Australian Banking Industry*. This research aims to examine the relationship between the Project Manager's leadership styles, the quality of the relationship between the Project Managers and hybrid project team members, and the performance of the projects.

You are requested to participate in an anonymous one-off online survey that seeks to elicit your thoughts, experiences, and perceptions while being part of a now-completed project run in a hybrid environment in the Australian banking industry. Before agreeing to participate, it is important to understand that your participation in this research is voluntary. You can withdraw at any time during the online survey until you have submitted your responses. There is no financial benefit for participating. There are no known risks related to your participation in this research beyond the inconvenience of time. Confidentiality of your responses and results will be tightly maintained. No identifying information will be requested or reported in the research findings. Your responses will greatly contribute to the literature on project leadership, the hybrid work model, and the Australian banking industry.

If you would like to proceed with the online survey, please acknowledge that you have been provided with information about the research and that you consent to participate in the research from the below 'Consent Statement' section.

Your time, insights, and participation in the research are highly appreciated.

Sincerely,

Brinda Shrestha
Researcher
[SSBM](#) Geneva
brinda@ssbm.ch

Consent Statement

I understand that by clicking 'Yes':

- I am voluntarily participating in the research;
- I understand that I can withdraw from the research at any time during the survey;
- I have read the 'Participant Information Sheet';
- I understand that the confidentiality of the collected information will be maintained;
- I don't expect to receive any benefit or payments for my participation; and
- I have been able to ask any questions I might have, and/or understand that I am free to contact the researcher with any questions I may have about the research.

I confirm my consent to participate in the research

Yes No

APPENDIX C

PARTICIPANT INFORMATION SHEET



Participant Information Sheet

Research Topic:

Effective Project Leadership Styles for Hybrid Teams in the Australian Banking Industry

Researcher:

Brinda Shrestha, Doctoral Research Student from the Faculty of Business at Swiss School of Business & Management (SSBM) Geneva

Research/ Academic Mentor:

Dr. Jacqueline Suaverdez, DBA, Swiss School of Business and Management (SSBM) Geneva

Dear Participants,

As part of my doctoral studies with the Swiss School of Business and Management (SSBM) Geneva, I am conducting academic research to gain insights into the effective project leadership styles of Project Managers leading the hybrid project teams in the Australian banking industry. This research aims to examine the relationship between the Project Manager's leadership styles, the quality of the relationship between the Project Managers and hybrid project team members, and the performance of the projects.

The online survey seeks to elicit your thoughts, experiences, and perceptions and should only take approximately 15 minutes to complete. Your responses will greatly contribute to the literature on project leadership, the hybrid work model, and the Australian banking industry. Before agreeing to participate, it is important to understand that your participation in this research is voluntary and there is no financial benefit for participating.

I would greatly appreciate your time and insights and your response is highly valued.

1 Introduction

You are invited to take part in this research project, titled 'Effective Project Leadership Styles for Hybrid Teams in the Australian Banking Industry'. You have been invited because you meet the following selection criteria to participate in the online survey: (a) you have been members or stakeholders of a project team working in a hybrid environment, (b) the projects you work on or have worked is in the banking industry in Australia, and (c) the project has been completed.

This Participant Information Sheet tells you about the research project. It explains the processes involved with taking part. Knowing what is involved will help you decide whether you want to participate in the research or not.

Please read this information carefully. Ask questions about anything that you don't understand or want to know more about.

Participation in this research is voluntary. If you don't wish to take part, you don't have to.

If you decide you want to take part in the research project, you will be asked to provide consent through the online survey link under the consent section. By agreeing to proceed with the survey, you are telling us that you:

- Understand what you have read
- Consent to take part in the research project
- Consent to be involved in the research described
- Consent to the use of your responses through an online survey.

2 What is the purpose of this research?

The Australian banking industry has seen a significant shift towards hybrid work models. This has necessitated effective project leadership to navigate the challenges of managing both remote and face-to-face teams. Although there is a growing focus on project leadership in a hybrid environment, literature on this domain is scarce. There is a limited understanding of the relationship between a Project Manager's leadership style, Leader-Member Exchange (LMX), and project performance in a hybrid environment.

The proposed study shall focus on the hybrid project teams in the Australian banking industry and identify the Project Manager's key leadership styles that can lead to project success, while also examining whether LMX mediates the relationship between Project Manager's leadership styles and project success. Data will be collected through an online survey for quantitative analysis. The study shall have practical implications for project leaders in the Australian banking industry offering guidance on effective leadership styles that can navigate the complexities of hybrid project teams to drive successful project outcomes.

The results of this research will be used by the researcher, Brinda Shrestha, to obtain a Doctorate in Business Administration (DBA) degree.

3 What does participation in this research involve?

You are requested to participate in an anonymous one-off online survey that has 4 sections consisting of a total of 57 items and will take approximately 15 minutes to complete. All survey items are multiple-choice. Before agreeing to participate, it is important to understand that your participation in this research is voluntary and there is no financial benefit for participating.

If you decide to take part in the research project, you can click on the online survey link provided to you which shall ask you to provide consent to participate in this research project. You will then proceed to Section A, where the first 3 questions determine that you meet the selection criteria and that you are eligible to participate. If the screening questions show that you meet the requirements, then you will be able to start the online survey. If the screening questions show that you cannot participate, the online survey will end. The remaining 7 items are about the project and demographic information. Section B of the online survey is on the Project Manager's leadership styles and consists of 34 items. Section C has 7 items developed to measure the quality of the relationship between a Project Manager and hybrid team members, while Section D has 6 items developed to measure the project performance.

This research has been designed to ensure the researcher interprets the results fairly and appropriately and avoids jumping to conclusions. There are no costs associated with participating in this research, nor will you be paid.

4 Do I have to take part in this research project?

Participation in this research and online survey is voluntary. If you do not wish to take part, you do not have to. Should you feel uncomfortable or unwilling to complete the online survey at any stage, you may stop and close your browser without any consequences for you. Any incomplete datasets will be deleted and will not be used for analysis. The online survey is anonymous and will not record any of your personal identifiers, hence, once you hit the 'Submit' button, you will no longer be able to remove your response from the dataset as the researcher will not be able to identify your response.

5 What are the possible benefits of taking part?

There will be no clear direct benefit to you from your participation in this research; however, your responses will greatly contribute to the literature on project management, the hybrid work model, and the Australian banking industry. The research shall also have practical implications for project leaders in the Australian banking industry offering guidance on effective leadership styles that can navigate the complexities of hybrid project teams to drive successful project outcomes.

6 What are the possible risks and disadvantages of taking part?

There are no anticipated risks to you as a participant. The only risk/burden is the time taken to complete the survey. If you feel that some of the questions are unsuitable, pick the closest response. If you do not wish to answer a question or participate, you may stop immediately.

Confidentiality is assured during this process, and at no stage will your responses or insights be shared outside of the Swiss School of Business and Management (SSBM), unless legally obligated. Your name will not be associated with any data collected and the data will be kept secure and destroyed after seven years. This research has been approved by the Swiss School of Business and Management (SSBM) Ethics Committee via the Ethics Review Application.

No individual or identifying data will be provided to your organization. Furthermore, your organization will not know if you have participated in the survey.

7 What if I withdraw from this research project?

If you do not wish to take part, you do not have to. Should you feel uncomfortable or unwilling to complete the online survey at any stage, you may stop and close your browser without any consequences for you. Any incomplete datasets will be deleted and will not be used for analysis. The online survey is anonymous and will not record any of your personal identifiers, hence, once you hit the 'Submit' button, you will no longer be able to remove your response from the dataset as the researcher will not be able to identify your response.

8 What happens when the research project ends?

The results of the responses from the online survey will be used to measure the effectiveness of a Project Manager's leadership styles. The results will be used in the Doctorate of Business Administration (DBA) Dissertation and conclusions from the research will be documented and recommendations will be made for practitioners and businesses, with directions for future research opportunities.

9 What will happen to information about me?

Any information obtained in connection with this research project will remain confidential and will not be identifiable to you. Your information will only be used for this research and it will not be disclosed to anyone outside of SSBM Geneva, except as required by law.

The results of this research will form part of an overall research dissertation. Furthermore, it is anticipated that the results of this research shall be disseminated, published, and/or presented in a variety of forums (including peer-reviewed conferences and or articles and possible professional publications). In any publication and/or presentation, information will be provided in an aggregate manner in such a way that you cannot be identified. Any survey data you provide as part of completing the survey will not be shared with your organization. Your name or personal identifier will not be associated with any data collected and the data will be kept secure and destroyed after seven years.

10 Who is organizing and funding the research?

This research is self-funded by the researcher. You will not benefit financially from your involvement in this research project.

11 Who has reviewed the research project?

The ethical aspects of this research project have been approved by the Academic Mentor and Ethical Review Board of *SSBM Geneva*.

12 Who do I contact if I have any concerns or complaints about the research?

The person you may need to contact will depend on the nature of your query. If you have any questions or concerns about the research, please don't hesitate to contact:

- (a) Researcher: Brinda Shrestha via email brinda@ssbm.ch
- (b) Academic Mentor: Dr. Jacqueline Suaverdez via email jacqueline@ssbm.ch

If you have any complaints about any aspect of the research, the way it is being conducted, or any questions about being a research participant in general, or the appropriateness of this research, then you may contact:

- (a) Academic Mentor: Dr. Jacqueline Suaverdez via email jacqueline@ssbm.ch
- (b) Executive Officer, Human Research Ethics Committee via email to contact@ssbm.ch

Kind Regards,
Brinda Shrestha
Researcher

APPENDIX D
SURVEY QUESTIONS

Eligibility Questions

Q1	Do you work or have you worked in the banking industry in Australia?	<input type="checkbox"/> Yes, <input type="checkbox"/> No
Q2	Do you work or have you worked on projects in a hybrid environment (a combination of face-to-face and remote working)?	<input type="checkbox"/> Yes, <input type="checkbox"/> No
Q3	Has the project, this survey response will be based on, been completed?	<input type="checkbox"/> Yes, <input type="checkbox"/> No

Personal Demographic and Project-Related Questions

Q4	Gender	<input type="checkbox"/> Male, <input type="checkbox"/> Female, <input type="checkbox"/> Prefer not to answer
Q5	Age	<input type="checkbox"/> Under 21, <input type="checkbox"/> 21-30, <input type="checkbox"/> 31-40, <input type="checkbox"/> 41-50, <input type="checkbox"/> 51 and over
Q6	Level of education	<input type="checkbox"/> High School, <input type="checkbox"/> Bachelors, <input type="checkbox"/> Masters, <input type="checkbox"/> Doctorate
Q7	Experience working on projects	<input type="checkbox"/> Less than 1 year, <input type="checkbox"/> 1-5 years, <input type="checkbox"/> 6-10 years, <input type="checkbox"/> 11-15 years, <input type="checkbox"/> Over 15 years
Q8	The type of project this survey response will be based on	<input type="checkbox"/> Regulatory & Compliance, <input type="checkbox"/> Strategic/Transformational, <input type="checkbox"/> Operational
Q9	How many days a week did you work remotely, while working on the project this survey response will be based on?	<input type="checkbox"/> 1 day, <input type="checkbox"/> 2 days, <input type="checkbox"/> 3 days, <input type="checkbox"/> 4 days, <input type="checkbox"/> 5 days
Q10	Your role in the project, this survey response will be based on	<input type="checkbox"/> Project Manager, <input type="checkbox"/> Project team member, <input type="checkbox"/> Project stakeholder

Authentic Leadership Questions

	As a leader, the Project Manager:	1= Strongly Disagree	2= Disagree	3= Neutral	4= Agree	5= Strongly Agree
Q11	sought feedback to improve interactions with others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q12	could accurately describe how others viewed his or her capabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q13	said exactly what he or she meant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q14	was willing to admit mistakes when they were made.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q15	demonstrated beliefs/values that were consistent with actions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q16	made decisions based on his/her core beliefs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q17	solicited views that challenged his or her deeply held positions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q18	listened carefully to different points of view before coming to conclusions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ethical Leadership Questions

	As a leader, the Project Manager:	1= Strongly Disagree	2= Disagree	3= Neutral	4= Agree	5= Strongly Agree
Q19	conducted his or her personal life ethically.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q20	defined success not just by results but also by the way that they were obtained.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q21	listened to what employees had to say.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q22	made fair and balanced decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q23	could be trusted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q24	set an example of how to do things the right way in terms of ethics.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q25	had the best interests of employees in mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q26	when making decisions, asked “What is the right thing to do?”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Transactional Leadership Questions

Due to copywriting conditions, the items administered in the survey cannot be listed here.

Refer to Appendix E for sample items.

Transformational Leadership Questions

Due to copywriting conditions, the items administered in the survey cannot be listed here.

Refer to Appendix E for sample items.

LMX Questions

Q45	Did you know where you stand with your Project Manager (project team members) . . . [and] did you usually know how satisfied your Project Manager (project team members) was/were with what you did?	1= Rarely <input type="checkbox"/>	2= Occasionally <input type="checkbox"/>	3= Sometimes <input type="checkbox"/>	4= Fairly often <input type="checkbox"/>	5= Very often <input type="checkbox"/>
Q46	How well did your Project Manager (project team member) understand your job problems and needs?	1= Not a bit <input type="checkbox"/>	2= A little <input type="checkbox"/>	3= A fair amount <input type="checkbox"/>	4= Quite a bit <input type="checkbox"/>	5= A great deal <input type="checkbox"/>
Q47	How well did your Project Manager (project team member) recognize your potential?	1= Not at all <input type="checkbox"/>	2= A little <input type="checkbox"/>	3= Moderately <input type="checkbox"/>	4= Mostly <input type="checkbox"/>	5= Fully <input type="checkbox"/>
Q48	Regardless of how much formal authority your Project Manager (project team member) had built into his or her position, what were the chances that your Project Manager (project team member) would use his or her power to help you solve problems in your work?	1= None <input type="checkbox"/>	2= Small <input type="checkbox"/>	3= Moderate <input type="checkbox"/>	4= High <input type="checkbox"/>	5= Very High <input type="checkbox"/>
Q49	Again, regardless of the amount of formal authority your Project Manager (project team member) had, what were the chances that he or she would “bail you out” at his or her expense?	1= None <input type="checkbox"/>	2= Small <input type="checkbox"/>	3= Moderate <input type="checkbox"/>	4= High <input type="checkbox"/>	5= Very High <input type="checkbox"/>
Q50	I had enough confidence in my Project Manager (project team member) that I would defend and justify his or her decision if he or she were not present to do so.	1= Strongly disagree <input type="checkbox"/>	2= Disagree <input type="checkbox"/>	3= Neutral <input type="checkbox"/>	4= Agree <input type="checkbox"/>	5= Strongly Agree <input type="checkbox"/>
Q51	How would you characterize your working relationship with your Project Manager (project team member)?	1= Extremely ineffective <input type="checkbox"/>	2= Worse than average <input type="checkbox"/>	3= Average <input type="checkbox"/>	4= Better than average <input type="checkbox"/>	5= Extremely effective <input type="checkbox"/>

Project Success Questions

		1= Strongly Disagree	2= Disagree	3= Neutral	4= Agree	5= Strongly Agree
Q52	Requirements specified at the beginning of the execution phase were met.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q53	Technical problems were successfully identified and resolved.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q54	Project schedules were adhered to.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q55	Project cost and budget objectives were met.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q56	Project clients and/or product users were satisfied with the project outputs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q57	There were no quality problems related to project outputs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E

PERMISSION TO ADMINISTER MULTIFACTOR LEADERSHIP QUESTIONNAIRE

For use by Brinda Shrestha only. Received from Mind Garden, Inc. on April 10, 2024

**Permission for Brinda Shrestha to administer 100 copies
within three years of April 10, 2024**

Multifactor Leadership Questionnaire™
Form 5X-Short Instrument
Leader Form, Rater Form, & Scoring Guide

License to Administer

by Bruce Avolio and Bernard Bass

Published by Mind Garden, Inc.
www.mindgarden.com

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Permission Letter



www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Multifactor Leadership Questionnaire

The license holder has permission to administer the complete instrument in their research, however, only three sample items from this instrument as specified below may be included in the research write-up, thesis, or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.

Sample Items:

As a leader

- I talk optimistically about the future.
- I spend time teaching and coaching.
- I avoid making decisions.

The person I am rating

- Talks optimistically about the future.
- Spends time teaching and coaching.
- Avoids making decisions

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Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

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APPENDIX F

RECENT GOOGLE SCHOLAR SEARCH FOR KEY LEADERSHIP STYLES

GOOGLE SCHOLAR SEARCH ON 03/07/2024	RESULTS INCLUDING “IN PROJECTS”	RESULTS INCLUDING “IN BANKS”
Authentic leadership	997K	168K
Ethical leadership	2,590K	494K
Transactional leadership	182K	53K
Transformational leadership	460K	80K

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