

THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP ON
TEAM INNOVATION AND TEAM PERFORMANCE

Tan Ai Wah

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ABSTRAK

Akibat globalisasi dan kepantasan perubahan, organisasi kini disaran agar menyesuaikan diri dan menggalakkan perubahan agar terus kompetitif. Organisasi kini dijangka perlu terus berinovasi dan menghasilkan produk dan servis yang lebih baik. Keluwesan sesebuah organisasi dalam menyesuaikan diri dengan perubahan yang pantas adalah salah satu syarat utama untuk mengekalkan keunggulan kompetitif. Kajian ini dilaksanakan dengan tujuan meneliti hubungan antara kepimpinan transformasi dan prestasi pasukan, dan peranan inovasi pasukan dalam hubungan itu.

Berdasarkan hasil kajian, kepimpinan transformasi didapati mempengaruhi prestasi pasukan secara positif, walaupun bukan sepenuhnya. Didapati juga bahawa terdapat sebahagian hubungan positif antara kepimpinan transformasi dan inovasi pasukan. Selain itu, prestasi pasukan dipengaruhi oleh inovasi pasukan. Daripada hasil ujian pembolehubah penyederhana, inovasi pasukan didapati mempengaruhi hubungan antara kepimpinan transformasi dan prestasi pasukan.

Kesimpulannya, kajian ini memberikan implikasi kepada pihak pengurusan dan pemimpin kini, demi menuju ke arah peningkatan pencapaian pasukan dan organisasi.

ABSTRACT

The globalized, fast-paced world today calls for organizations to adapt the way they conduct their business and to promote change in order to remain competitive. Expectations are high for organizations to continuously innovate and produce even better products and services. An organization's flexibility in adapting to changes rapidly is one of the core requirements for businesses to gain or maintain their competitive advantage. The present study was undertaken with the aim of studying the relationship between transformational leadership and team performance, and how team innovation mediates that relationship.

Based on the results of this study, it was found that transformational leadership, namely the *individualized consideration* factor, significantly influences team performance in a positive manner. There was also a partially positive and significant relationship between transformational leadership and team innovation. In addition, team performance was predicted by team innovation, namely the *vision* and *support for innovation* factors. The mediation test showed that team innovation played a partial mediating role in the relationship between transformational leadership and team performance.

All in all, this study provided several implications to existing and aspiring managers and leaders, in organizations aiming to improve their innovative efforts and performance.

Chapter 1

INTRODUCTION

Chapter 1 provides an overview of leadership, innovation and team performance. Problem statements based on the gaps in the present literature are discussed. Based on the problem statements, research objectives and research questions for the proposed study are developed. A list of terms commonly used in this research and their definitions are also included. This chapter closes with an overview of the remaining chapters in this report.

1.1 Background

The term leadership holds different meanings to different people. There is no single consensually agreed upon definition of leadership due to its complexity (Yukl, 2002). According to Northouse (2009, p. 3), “leadership is a process whereby an individual influences a group of individuals to achieve a common goal”. Similarly, de Jong and Den Hartog (2007, p. 44) viewed leadership as “the process of influencing others towards achieving some kind of desired outcome”. Other researchers (Stogdill, 1950; Korman, 1971; Raunch & Belhing, 1984, as cited in Bryman, 1986) defined leadership as the act of influencing the activities of an organized group towards setting and achieving goals. All these definitions saw leadership as a process, and therefore, it can be observed through the ways in which the leader behaves as opposed to viewing leadership as a trait which suggests that some individuals are born with special qualities that makes them leaders (Jago, 1982, as cited in Northouse, 2009).

Yukl (2002) stated that in general, employees' work behaviors are strongly affected by their leaders. Researchers (Amabile, 1998; Jung, 2001; Mumford & Gustafson, 1988) have also established that leadership style is a key influential factor that impacts creativity behaviors and performance. There are several theories on leadership. The transactional and transformational leadership theories were introduced by Burns (1978) when he depicted leadership on a spectrum with both those theories located at opposite ends of that leadership spectrum. The transactional leadership theory is based on the hypothesis that followers are motivated through a system of rewards and punishment. Transactional leaders promote stability and focus on defining roles and task requirements and offering rewards that are contingent on task fulfilment (Lussier & Achua, 2009). Hence, transactional leadership may not fit the needs of organizations looking to drive innovative efforts with the aim of ultimately enhancing their performance. On the other hand, transformational leadership occurs when leaders inspire their followers to act and create a higher sense of purpose. Transformational leaders aim to change the status quo by articulating to their followers the problems or opportunities for improvement and a compelling vision. Since the 1980s, research have found that transformational leadership is more effective than transactional leadership in generating the extra effort, commitment and satisfaction of those led (Avolio & Bass, 2002). According to Avolio, Waldman and Yammarino (1991), successful leaders will have to be more than just managers; instead they need to develop and motivate their followers, and encourage positive changes in individuals, groups, teams and organizations. This is in line with transformational leadership behaviors. Transformational leaders provide clear directions to their followers, understand and empathize with their followers' needs and motivate them to achieve better outcomes (Bass & Riggio, 2006). Such actions

encourage innovative efforts as only leaders who truly comprehend the views, aspirations or background of the followers may attempt to make changes. Thus, transformational leadership can be a catalyst of change which is especially crucial for facing rapid changes in the current global business environment. In a study by Kennedy (2002), Malaysian managers rated transformational leadership as a highly significant contributor to outstanding leadership.

Other than the leadership factor, innovative effort is also another key factor in determining success of an organization in creating and maintaining its competitive advantage. It is not feasible to influence all employees within an organization to innovate since there are many employees. Instead, the focus could be placed on entrusting leaders in the organization to drive innovative efforts within their followers. Management guru, Peter Drucker once said that "Innovation is the only competitive advantage a company really has, because quality improvements and price reductions can be replicated, as can technology. Therefore, if a company could have just one major capability, it should be innovation." Organizations are usually exposed to competition. Hence, innovations are a must in order to generate higher returns on the stakeholder's investments. A recent study by Boston Consulting Group placed Malaysia only as the 21st most innovation-friendly country; indicating that innovation is still at its infancy in Malaysia and improvements can still be made in that area. According to Hofstede's Power Distance Index (PDI), Malaysia scored a high 114 point. Leadership in Malaysia is more autocratic (Kennedy, 2002), and as a result employees may be more afraid or unwilling to disagree with their leaders. In turn, this creates a risk-averse culture which hinders innovative efforts. However, the importance of innovations has not slipped by un-noticed. Several initiatives from the

Malaysian government support the notion that innovation is imperative for success. Among those initiatives are the \$16.2 billion stimulus package and the assignment of Year 2010 as the Year of Innovation with the Malaysia Innovative 2010 (MI2010) campaign which aims to encourage innovations among Malaysians. It is also important to note that innovation does not take place in isolation. Innovating involves the interaction among various members of a team; each member with their own ideas, perspectives and capabilities.

Faced with the rapid changes in the business environment, organizations today need to be more creative and innovative in order to sustain their business, compete, grow and even lead in the market (Gumusluoglu & Ilsev, 2009). Innovation is also increasingly recognized as a key source of sustainable competitive advantage for organizations (Tseng, Liu & West, 2009). By engaging a more innovative workforce, a team's performance is expected to improve, and ultimately help enhance the organization's performance as a whole. This is because a team is a source of creativity and innovation since all the team members' knowledge, skills and experiences contribute towards producing new and useful products and processes (Lipman-Blumen & Leavitt, 1999, as cited in Bain, Mann & Pirola-Merlo, 2001). Based on past empirical studies, transformational leadership has been found to be an antecedent to organizational innovation (King & Anderson, 2002). Previous researchers (Keller, 1992; Waldman & Atwater, 1994) have determined that transformational leaders positively influence innovation in R&D units and at the project level. Hence, it is reasonable to postulate that the same effects will occur at the team level, since employees in organizations today are encouraged to work in teams.

In conclusion, this research hopes to contribute to the existing literature on transformational leadership, team innovation and team performance. The following section will elaborate on the current problem statement and the aim of this study.

1.2 Problem Statement

Gill's (1998) study suggested that Malaysian managers are more directive, less delegating and more transactional. Transactional leaders emphasize on the exchange between leader and followers by specifying the conditions and rewards that the followers will receive if they fulfill the task requirements. Such behavior is unlike the transformational leadership behavior which attempts to broaden the interests and develop the skills of followers. Hence, Malaysian managers being more transactional rather than transformational leaders are a concern since the Malaysian workforce is increasingly facing deficits in skills and innovation (Rasiah, 2003).

Change is the only constant in today's fast-paced environment. Due to globalization, the ease and speed in which information can be accessed and the increasing pressure from competition, organizations have been forced to adapt accordingly in the way they conduct their business (Katzenbach, 1998, as cited in Dionne, Yammarino, Atwater & Spangler, 2004). Increasing globalization and rapid technological growth have resulted in more complicated customer preferences and increased the need to shorten product lifecycles (Lee, 2008). According to Avolio et al. (1991), organizations' pursuit to develop new technology has stressed the importance of developing a workforce that is not only responsive to change, but also promotes change to remain competitive. An organization's flexibility in adapting to

such changes rapidly is one of the core requirements for businesses to gain or maintain their competitive advantage over their competitors. In order to improve responsiveness and flexibility, an organization would need to depend on the innovativeness of its workforce. Researchers (Cummings & Oldham, 1997; Tierney, Farmer & Graen, 1999; Andriopoulos & Lowe, 2000) have also suggested that expectations are high for organizations to continuously innovate and produce even better products and services in the current global economy. Innovation could also refer to the employees' abilities in finding new ways to accomplish tasks, or even giving suggestions on how to improve the business processes. However, there is still room for growth on innovative efforts in Malaysia.

The world today has become more complicated, and changing times call for dynamic, driven leaders (Williams, 1998, as cited in Stone, Russell & Patterson, 2004). More emphasis has been placed on leadership to be more change and development-oriented in order to build competitive advantage and keep abreast of the current trends (Arvonen & Pettersson, 2002, as cited in Lee, 2008). Leadership is a key factor in the development of such a workforce since various factors amongst which is motivation, trust, and support and guidance from a leader would help encourage innovation at the individual and subsequently at the team-level. With employees being intellectual assets of an organization, it is essential that organizations understand their needs and play a role in helping the employees develop personally as well as professionally.

The need for an organization to improve its flexibility and responsiveness have caused tasks to become more complicated thus requiring more time to be

completed than can be afforded by individual effort alone (Katzenbach, 1998; Swezey & Salas, 1992, as cited in Dionne et al., 2004). Hence increasingly organizations are focusing on encouraging team work at the workplace. As the poet, Donne once stated, “No man is an island”. Team members need to rely on and interact with one another in their effort towards achieving a common goal. Hence, it is hoped that the present research on transformational leadership, team innovation and team performance will be a worthwhile study for future exploration.

1.3 Research Objectives

The objective of this study is to investigate the relationship between transformational leadership and team performance, and whether team innovation mediates that relationship. Specifically, this study attempts to accomplish the following objectives:

- 1) Investigates the relationship between Transformational Leadership and Team Performance.
- 2) Investigates the relationship between Transformational Leadership and Team Innovation.
- 3) Investigates the relationship between Team Innovation and Team Performance.
- 4) Investigates if Team Innovation mediates the relationship between Transformational Leadership and Team Performance.

1.4 Research Questions

In order to achieve the aforementioned objectives, this study aims to answer the following research questions:

- 1) What is the relationship between Transformational Leadership and Team Performance?
- 2) What is the relationship between Transformational Leadership and Team Innovation?
- 3) What is the relationship between Team Innovation and Team Performance?
- 4) Does Team Innovation mediate the relationship between Transformational Leadership and Team Performance?

1.5 Significance of Study

Although there has been extensive research in the past on the impact of transformational leadership on individual performance, the effect of transformational leadership on team performance has not been as widely researched thus far (Dionne et al., 2004; Judge & Piccolo, 2004, as cited in Schaubroeck, Lam & Cha, 2007). Similarly, the mediating processes between transformational leadership and performance have not been examined although its importance has been emphasized (Avolio & Yammarino, 2002; Gordon & Yukl, 2004, as cited in Boerner, Eisenbeiss & Griesser, 2007). There are many complexities surrounding the integration of transformational leadership theory into team performance, however, such a study is a worthwhile effort considering the significant improvement that transformational

leadership has over performance (Avolio & Yammarino, 2002; Bass, 1985, 1988, 1990, as cited in Dionne et al., 2004).

Past studies have found that leadership is important in creating a climate that is conducive to employees' innovativeness and creativity (Amabile, Conti, Coon, Lazenby & Herron, 1996; Mumford & Gustafson, 1988). Not much emphasis has been placed on studying the effects of transformational leadership on employees' innovation (Dvir, Eden, Avolio & Shamir, 2002; Howell & Avolio, 1993; Lowe, Kroeck & Sivasubramaniam, 1996, as cited in Gumusluoglu & Ilsev, 2009). Since employees make up the teams in an organization, it is reasonable to posit that the impact of transformational leadership on employees' innovation would also be experienced at the team level. Organizations are expected to continuously innovate and improve their products and services in today's global economy (Cummings & Oldham, 1997; Tierney et al., 1999; Andriopoulos & Lowe, 2000). Thus, it is important to study the impact that transformational leaders have on team innovation and to examine the impact of team innovation on team performance.

The available literatures are mainly in the context of organizations in the Western countries. Since transformational leadership is a fairly new theory on the subject of leadership, it will be interesting to study how this leadership style impacts team performance in Malaysia. Such knowledge substantiated with the empirical results would be a significant contribution to the existing literature on transformational leadership and team performance. It is hoped that the findings from this study will encourage transformational leadership behaviors which will help in encouraging more innovative thinking from the team members. This in turn will

improve the team performance and ultimately the organizational performance, leading to a sustainable competitive advantage for the organization.

1.6 Definition of Key Terms

Leadership

Leadership is a process in which an individual influences a group of individuals to achieve a common goal (Northouse, 2009).

Transformational Leadership

A transformational leader is one who demonstrates the four attributes of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration, in encouraging and motivating his or her followers to achieve outcomes beyond their expectations while developing their own leadership capacity at the same time (Bass & Riggio, 2006).

Team Innovation

Team innovation refers to the initiation and application of new and useful ideas, processes, products or procedures at the team level (de Jong & Den Hartog, 2007). Team, here, implies two or more individuals with different tasks who work together to achieve a common objective (Branick, Salas & Prince, 1997).

Team Performance

Team performance concerns the accomplishment of activities and tasks required of the team (Ma & Jiang, 2008). In this study, team performance refers to the team

members' self-assessment on how well they are accomplishing activities and tasks as a team.

1.7 Organization of Chapters

There will be a total of five chapters in the present study. Chapter 1 provides an overview of the study on transformational leadership and team performance. It starts off with the background of the study, followed by a description of the problems currently being faced. This is followed by the research objectives and research questions. At the end of the chapter, the key terms in this study are defined.

In Chapter 2, the literature from past studies are reviewed and discussed. The chapter also describes the development of the theoretical framework for this study and the formulation of the hypotheses.

Subsequently, Chapter 3 describes the design of the present research. In the chapter, the population, sampling plan, variables and their measures are explained, along with the method of data collection. The chapter closes with a preliminary overview of the type of data analysis that is conducted on the data gathered.

In Chapter 4, the various analysis performed on the variables are described. The chapter also provides an overview of the responses received and the profiles of the respondents. The hypotheses of this study are tested and their results are discussed in the chapter as well.

Finally, Chapter 5 summarizes the findings from this study, based on the discussion of the results from the data analysis. In addition, the chapter also outlines the implications of this study and its limitations so as to enable the exploration of future researches within the topics of transformational leadership and team performance.

Chapter 2

LITERATURE REVIEW

Chapter 2 provides the basis of this research through discussions on existing literature surrounding the research topic. In this chapter, past literatures in the areas of transformational leadership, team innovation and team performance are reviewed. At the end of this chapter, the theoretical framework and hypotheses for this research are developed.

2.1 Leadership

Given its complex nature, there is no precise definition of leadership (Antonakis, Cianciolo & Sternberg, 2004). However, a review of the leadership literature indicated that leadership be described either as traits that a leader possesses or a process. The trait viewpoint conceptualizes leadership as characteristics that individuals have in varying degrees, hence suggesting that leadership is restricted only to those who have special, usually inborn talents. On the other hand, the process viewpoint states that leadership occurs within the context of interactions between leaders and followers, and therefore leadership is observable and can be learned (Northouse, 2009).

Based on extant literature, many theories of leadership are available. Major theories of leadership include the traits theory, leader-member exchange theory, contingency theory, situational leadership theory, transactional leadership theory and transformational leadership theory. Traits theory of leadership, also known as ‘Great

Man' theory proposes common characteristics of effective leaders, which contributed to the notion that leaders were born, not made. A criticism of the traits theory was that the list of leadership traits was not definitive. Findings from studies conducted over the past 100 years showed uncertain results and new traits kept emerging (Northouse, 2009). On the other hand, leader-member exchange theory conceptualizes leadership as a process that is centred on the interactions between leaders and followers. It assumes that leaders develop exchange relationships with each of their followers and that the quality of those leader-member exchange relationships influences the followers responsibility, decision influence, access to resources and performance. However, as a result of the exchange relationships, the issue of discrimination in the workplace is raised since some followers may be perceived to be part of the more privileged group. Other theories of leadership, namely the contingency and situational leadership theory suggests that successful leaders use different styles according to the situation and their followers. The main difference between these two theories of leadership is that contingency theory takes a broader view that includes contingent factors about the leaders' capability and other situational variables, whereas situational leadership theory tends to focus more on the behaviors that the leader should adopt, given the situational factors. Although situational leadership theory is widely used in leadership training and development, the lack of a strong body of research on situational leadership raises questions about its theoretical basis (Northouse, 2009). With regards to the transactional and transformational leadership theories, they were both introduced by Burns (1978) when he depicted leadership on a continuum with transactional leadership and transformational leadership at the extreme ends of the continuum. Transactional leaders promise rewards for desired

performance. On the other hand, transformational leaders motivate followers to aim for goals beyond their self-interest.

Leaders in organizations today are expected to be more than just managers. They need to develop and inspire their followers, and promote positive changes in individuals, groups, teams and organizations (Avolio et al., 1991). Hence, for organizations seeking to drive change and innovations, transformational leadership would turn out to be more effective. The following section describes transformational leadership in detail.

2.2 Transformational Leadership

As introduced by Burns (1978), transformational leadership raises both leader and followers to higher levels of motivation and morality whereas transactional leadership involves an exchange of material or psychological reward in return for the followers' compliance with the leader's wishes, with no sense of any higher purpose. Burns' theory was extended by Bass and Avolio (1994). According to them, transformational leadership includes 4 factors; idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass & Avolio, 1994). The following sections describe each of the transformational leadership dimensions and past studies conducted on transformational leadership.

2.2.1 Idealized Influence

Idealized influence refers to the behaviors of a transformational leader which inspires his or her followers' trust, admiration, respect, and their wants to emulate the leader. Those behaviors include considering the needs of their followers above the leader's own interests or gains, and demonstrating consistency and good ethics in their conduct (Bass & Avolio, 1994). Similarly, Northouse (2009) stated that such leaders demonstrate high standards of moral and ethics. By so doing, followers would be inspired to emulate the leader, thus raising the bar in terms of the quality of their performance at work. Previous studies have confirmed that idealized influence has a direct impact on individual performance (Bass, 1990; Bass & Avolio, 1994; Densten, 2002, as cited in Dionne et al., 2004). Burns (1978) referred idealized influence as charisma.

2.2.2 Inspirational Motivation

Inspirational motivation and idealized influence are usually combined to form charismatic-inspirational leadership (Bass & Riggio, 2006). Inspirational motivation refers to transformational leaders sharing a compelling vision or goal with their followers and constantly motivating them to reach for the goal while boosting their confidence and reassuring them that barriers faced can be overcome (Bass & Avolio, 1994). Higher levels of motivation have been linked with higher levels of performance (Shamir, House & Arthur, 1993). According to Avolio et al. (1991), even in the absence of the leader, inspirational motivation often produces individual

effort and performance beyond normal expectations, thus creating followers who are independent in handling challenges on their own.

2.2.3 Intellectual Stimulation

Intellectual stimulation refers to transformational leaders inspiring their followers' creativity and innovativeness by questioning norms and finding new approaches and solutions to problems (Bass & Avolio, 1994). Through intellectual stimulation, transformational leaders draw the interest of their followers by promoting creativity and innovative thinking, whereby followers are encouraged to view situations or problems in new perspectives in order to discover different methods of doing things or in finding new solutions to the problems (Bass & Avolio, 1994). Transformational leaders can enhance their followers' innovativeness through motivation and intellectual stimulation (Keller, 1992; Mumford, Scott, Gaddis & Strange, 2002). It has also been suggested by Dionne et al. (2004) that intellectual stimulation directly affects group performance since leaders encourage group members to think through and resolve problems independently, thus concurrently developing followers' abilities and solutions. Bass and Avolio (1994) suggest using intellectual stimulation to address conflicts that are task-related.

2.2.4 Individualized Consideration

Individualized consideration refers to the individual attention that transformational leaders pay to their followers, where the leader acts as a coach and mentor in recognizing and developing the followers (Bass & Riggio, 2006). They treat

their followers as individuals and not only members of a team and thus, establish a one-to-one relationship with the followers in order to listen to and understand their needs and goals (Bass & Avolio, 1994). This in turn supports the followers' development. As a result of individualized consideration and other transformational leadership behaviors, followers are empowered (Behling & McFillen, 1996, as cited in Stone et al., 2004). Similarly, Dionne et al. (2004) stated that such "one-to-one relationship" implied follower empowerment and better communication among group members and between leader and group members.

2.2.5 Past Studies on Transformational Leadership

Many research have been conducted on transformational leadership. A past study has found that by aligning values of followers to their own and to the organization's, transformational leaders are able to increase their followers' intrinsic motivation more than other leadership styles (Gardner & Avolio, 1998, as cited in Lee, 2008). The enhanced motivation of each individual in a team would result in an improved motivation of the team overall, and thus, inspire them to think and perform outside the norms. This is supported by Gumusluoglu and Ilsev (2009) who discovered that transformational leadership is positively related to individual creativity and organizational innovation.

Transformational leadership enhances the effects of transactional leadership on followers (Bass, 1990, as cited in Stone et al., 2004). Unlike the transactional leader who relies on rewards and punishment in order to accomplish goals, transformational leaders attempt to stimulate and motivate their followers to perform

beyond the “status quo” and to achieve remarkable results (Bass & Riggio, 2006). A transformational leader is aware of the needs of his or her followers and motivates and helps them to develop and achieve their fullest potential (Northouse, 2009). As opposed to transactional leaders also, leaders exhibiting transformational leadership behaviors support “out of the box” thinking which results in the generation of more creative ideas and solutions (Sosik, Avolio & Kahai, 1997, as cited in Jung, Chow & Wu, 2006). Therefore, theoretically, it has been said that transformational leadership enhances followers’ performance (Burns, 1998; Yukl, 1998, as cited in Stone et al., 2004).

Furthermore, studies have found that transformational leadership is positively correlated to leader effectiveness ratings, leader and follower satisfaction, followers’ efforts, and overall organizational performance (Avolio, Waldman & Einstein, 1988; Bass, Avolio & Goodheim, 1987; Howell & Avolio, 1993; Lowe, Kroeck & Sivasubramaniam, 1996; Seltzer & Bass, 1990; Waldman, Bass & Einstein, 1987; Yammarino, Spangler & Bass, 1993, as cited in Humphreys, 2002). Transformational leaders inspire change and encourage their followers to share convergent values towards achieving higher levels of performance (House & Shamir, 1993; Jung & Avolio, 2000, as cited in Jung et al., 2006). Similarly, other researchers have shown that transformational leadership improves performance beyond expectations (Avolio & Yammarino, 2002; Bass, 1985, 1988, 1990, as cited in Dionne et al., 2004). Specifically, at the team level, transformational leadership is positively related to team potency, which in turn leads to an improvement in team performance (Judge & Piccolo, 2004, as cited in DuBrin, 2009).

Some researchers have suggested that transformational leadership is enhanced by a lack of proximity (Hollander, 1978; Yammarino, 1994, as cited in Humphreys, 2002), whereas others have found that physical distance moderates the effect between a charismatic leadership style and follower performance (Howell, Neufeld & Avolio, 1998). However, in a laboratory study conducted by Kelloway, Barling, Kelley, Comtois, and Gatien (2003), it was revealed that remote transformational leadership still affects performance and attitudes positively. Thus, it can be surmised that transformational leadership affects performance regardless of the physical proximity between the leader and the followers. It has also been suggested that transformational leadership is more appropriate for leading employees who are well educated and enjoy challenging work (Hater & Bass, 1988, as cited in Hötzel, 2004).

Recent studies have shown that transformational leadership is important regardless of industries (Avolio & Yammarino, 2002, as cited in Bass & Riggio, 2006). Studies have also been conducted in non-Western societies, hence suggesting that transformational leadership is effective in various settings (Den Hartog et al., 1999; Dvir & Shamir, 2003; Jung, Chow & Wu, 2003; Lim & Ployhart, 2004; Shin & Zhou, 2003; Walumbwa & Lawler, 2003, as cited in Schaubroeck et al., 2007).

2.3 Team Innovation

Today's business environment is fraught with competition, globalization and rapid technological advancements. In order to sustain their business, organizations need to improve on creativity and innovativeness (Jung, Chow & Wu, 2003; Tierney

et al., 1999). Hence, it can be seen that innovation is an important factor for organizational growth.

King and Anderson (2002) suggested that innovation starts with the thought of a new idea and ends when the idea is implemented. Similarly, innovation theorists have described innovation as a two-part process involving the generation of an idea, and the implementation of the same (Zaltman, Duncan & Holbek, 1973; Axtell, Holman, Unsworth, Wall, Waterson & Harrington, 2000, as cited in de Jong & Den Hartog, 2007). According to the Product Development and Management Association, innovation is defined as creating something new, be it a product, a service or a process (García-Morales, Matías-Reche & Hurtado-Torres, 2008). West and Farr (1989, p. 16) defined innovation as “the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit role performance, the group, the organization or the wider society”. Thus, innovating not only creates the idea of something new, but it also involves the actual implementation of that idea. The idea generation portion of that process is often referred to as creativity, which occurs at the individual level, whereas innovation refers to the actual implementation of ideas at a group, team or organizational level (Gumusluoglu & Ilsev, 2009).

Anderson and West (1998) developed an interrelated four-factor theory of group climate for innovation. These four factors are predictive of innovativeness. A fifth factor, social desirability was introduced with the aim of cautioning respondents against excessive faking of climatic responses and impression management. However, its validity has not been substantiated thus far (Loo & Loewen, 2002). Past literatures

(Agrell & Gustafson, 1994; Anderson & West, 1996) have empirically proven that team innovation can be predicted by the Team Climate Inventory (TCI). The TCI, consisting of 44 items, is used to measure team climate for innovation (King & Anderson, 2002). The term “climate for innovation” is defined as work group or organization’s shared perceptions on the degree to which team processes support and facilitate innovation (Anderson & West, 1994, as cited in Tseng et al., 2009). Kivimäki and Elovainio (1999) proposed a shortened 14-item TCI which proved to be a reliable measure, with its Cronbach alpha value at 0.90. Loo and Loewen (2002) concluded that when there are time constraints, the 14-item short version TCI can be used as a measure. The four factors that predict climate for innovation, namely vision, participative safety, task orientation and support for innovation, are described in the following sections:

2.3.1 Vision

Vision refers to an idealized picture of the organization’s future. A vision should be clearly defined, achievable and mutually accepted by all members of the team (King & Anderson, 2002). A vision which is shared by the team helps to guide and focus the team members’ creativity, leading towards innovativeness. At the same time however, leaders should be cautious in setting goals which are too slack or too constricted as it may suppress creativity and innovation (Amabile, 1998). Too much limitation within the team may result in unmotivated employees whilst without any clear directions there may be disarray within the team in terms of their efforts at creativity and innovation. In addition, the presence of support for innovation is also important since having a vision without the support to achieve it will be futile.

2.3.2 Participative Safety

Participative safety refers to the level of involvement by the team in decision making, and the sense of security for members of the team to voice out their ideas without fear of ridicule or repercussions (King & Anderson, 2002). It creates a team climate which is trusting, non-threatening, non-judgmental, and supportive of creativity and innovation (Anderson & West, 1998). According to Anderson and King (1993), innovation is likely influenced by participative and collaborative leadership style. It has also been stated by West, Borill, Dawson, Brodbeck, Shapiro and Haward (2003) that when leaders encourage participation, there will be relatively higher levels of team innovation.

2.3.3 Task Orientation

Task orientation is defined as the team members' dedication in striving for excellence in their performance (King & Anderson, 2002). Anderson and West (1998) stated that within teams, task orientation is indicated by the emphasis on individual and team accountability, performance evaluation and modification control systems, reflecting upon work methods and team performance, intra-team advice, feedback and cooperation, mutual monitoring, performance and ideas' evaluation, clear outcome measures, exploration of opposing opinions and a concern to maximize quality of task performance.

2.3.4 Support for Innovation

Support for innovation refers to the actual support extended by the management and not just the articulation of it without any follow-up action (King & Anderson, 2002). Daft found that the availability of resources is required for innovation to take place while Schroeder, Van de Ven, Scudder, and Polley stressed that support from powerful stakeholder groups is needed to implement innovation (Daft, 1986; Schroeder, Van de Ven, Scudder & Polley, 1989, as cited in Anderson & West, 1998). In a study by de Jong and Den Hartog (2007), it was revealed that experiencing support helps in developing ideas.

2.3.5 Team Innovation as a Mediator

Past research (Avolio & Yammarino, 2002; Gordon & Yukl, 2004, as cited in Boerner, Eisenbeiss & Griesser, 2007) has suggested that a mediator should be examined in the relationship between transformational leadership and performance. Although integrating the transformational leadership theory into team performance can be complex, it is a useful study since transformational leadership significantly improves performance (Avolio & Yammarino, 2002; Bass, 1985, 1988, 1990, as cited in Dionne et al., 2004).

Transformational leadership was found to positively influence individual creativity and organizational innovation (Gumusluoglu & Ilsev, 2009). Schaubroeck et al. (2007) discovered that transformational leadership influenced team performance through the mediating effect of team potency. In a study by Bain et al. (2001), team