

**TRANSFORMATIONAL LEADERSHIP AND  
ORGANIZATIONAL INNOVATION: A STUDY OF  
MNCs IN MALAYSIA**

**OOI HUI YING**

**UNIVERSITI SAINS MALAYSIA**

**2009**



## DECLARATION

I hereby declare that the project is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at USM or any other institutions.

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(Signature)

NAME: OOI HUI YING

DATE: 15/07/2009

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A STUDY OF MNCs IN MALAYSIA

By

Ooi Hui Ying

(Pauline)

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## DEDICATION

~~ To My Beloved Mum and Dad – Lucy & Michael ~~  
*For their love, care and sacrifices*

~~ To My Beloved Sisters – Vivian & Irene~~  
*For their love and encouragement*

To All My Dear Friends & Colleagues  
*For their understanding and cooperation*

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## ABSTRAK

Kepantasan dalam perubahan dan perkembangan dunia semakin mendadak. Sememangnya, inovasi memainkan peranan yang penting. Kualiti kepimpinan seseorang pemimpin juga menggalakkan aktiviti yang melibatkan inovasi. Kajian ini mengkaji perhubungan antara kepimpinan transformasi dan inovasi organisasi. Selain itu, kajian ini juga menyiasat kohesif pasukan yang memainkan peranan sebagai dalam hubungan ini.

Hasil kajian ini menunjukkan bahawa perhubungan kepimpinan transformasi dan inovasi organisasi menunjukkan hubungan yang positif walaupun tidak sepenuhnya. Seterusnya, seperti mana yang dijangkakan daripada ujian pembolehubah penyederhana, kohesif pasukan memang memainkan peranan sebagai pembolehubah penyederhana, dalam menggalakkan inovasi organisasi. Perhubungan di antara kepimpinan transformasi dan kohesif pasukan juga menunjukkan jalinan yang positif tetapi tidak sepenuhnya. Hubungan antara kohesif pasukan dan inovasi organisasi juga tidak melainkan, di mana terdapat sifat positive dalam hubungan itu. Akhirnya, pemerhatian kajian ini turut mendapati bahawa jalinan antara kohesif pasukan dan inovasi organisasi juga menunjukkan hubungan yang positif.

Akhir sekali kajian ini memberikan implikasi kepada pengurus dan pemimpin hari ini yang bergerak ke arah inovasi.

## ABSTRACT

The fast paced global changing environment and competition among companies to obtain competitive advantage warrant better leadership qualities and innovation effort. The purpose of this research was to examine the relationship between transformational leadership and organizational innovation. The study also examined the mediator role played by team cohesiveness on the relationship of transformational leadership and organizational innovation.

The results of this study showed that the impact of transformational leadership was partially positive and significant on organizational innovation. However, *individualized consideration and intellectual stimulation* dimension of transformational leadership demonstrated a greater impact on organizational innovation. There was a partially positive and significant relationship between transformational leadership and team cohesiveness. In addition to that, organizational innovation was predicted by team cohesiveness. The mediation test suggested that team cohesiveness did play a mediating role in the relationship. The relationship between *rationalized optimism* and *mutual understanding and expectations* was partially mediated by team cohesiveness, while *individualized consideration and intellectual stimulation* and *support for innovation and task orientation* was fully mediated by team cohesiveness.

Lastly, this research provided several implications to aspiring managers and leaders as organizations are moving towards innovation.

# CHAPTER 1

## INTRODUCTION

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Chapter 1 introduces the general background on leadership and innovation as well as an overview of the scenario in Malaysia. Some problem statements pertaining to the research topic in question are discussed to address the gap in present literature. Research objectives and research questions guide the direction of this study in order to provide some significance to the pool of existing literature. Definition of key terms aims to provide useful meaning on some frequently used terms in this research. Finally, organization of remaining chapters listed an overview of the remaining topics found in this report

### **1.1 Background**

Leadership, as described by Yukl (2005) and Krause (2004) has a great influence on the subordinates' behavior to accomplish organizational goals. It involves an interaction process between leaders and subordinates. Many researchers found that leadership style is one of the most influential factors that have an impact on creativity behavior and performance (Amabile, 1998; Jung, 2001; Mumford & Gustafson, 1988), thus, affecting organizational innovation.

Among the many types of leadership, Tucker and Russell (2004) commented that an organization needs transformational leaders who provide new direction, inspiration, and behaviors for their organizations. These leaders are the change-agents in the organization and they are crucial in an ever-changing world. Apart from leadership factor, one of the important



factors in the success and competitive advantage of organizations lies in innovation (Woodman, Sawyer & Griffin, 1993). Gumusluoglu and Ilsev (2008) highlighted that transformational leadership has an impact on both individual and organizational level. However, Oldham and Cummings (1996) concluded that the effect of transformational leadership and creativity is at individual level, but the effect of innovation is at organizational level. Innovation is regarded as important by organization because innovative outcome will provide any organization the competitive advantage to stay profitable (Gianikis & McCue, 1997).

There are a few researchers studied leadership in the Malaysian context especially on theoretical frameworks of leadership preferences, behaviors, and power influence (Ansari, Ahmad and Aafaqi, 2004). Kennedy and Mansor (2000) found that due to cultural values and beliefs, Malaysian leaders lack of self-serving attitude by placing the interest of subordinates above themselves. A recent study by Kennedy (2002) reported that Malaysian managers rated transformational leadership as a highly important contributor to outstanding leadership. In other cultures and countries, many previous studies on transformational leadership were found to have positive impacts on organization. Researchers such as Arnold, Barling and Kelloway (2001), Bass, Jung, Avolio and Berson (2003), Hetland and Sandal (2003), as well as Wofford, Whittington and Goodwin (2001) indicated that transformational leadership had resulted in higher level of effectiveness and outcomes based on the followers' appraisal. Several studies were also found to be concentrated on the relationship between transformational leadership and personality (Hetland & Sandal, 2003; Bono & Judge, 2000; Roush & Atwater, 1992; Van Eron & Burke, 1992).

According to Bass (1985), the definition of the relationship between transformational leader and subordinate includes four elements such as idealized influence, inspirational motivation, individualized consideration and intellectual stimulation. In comparison to other leadership types, demonstration of these elements among transformational leaders indicated higher productivity and job satisfaction besides lower employee turnover rates (Masi & Cooke, 2000; Sparks & Schenk, 2001; Medley & Larochelle, 1995). In Tichy and Devanna's (1990) study, transformational leadership is concerned with change, innovation and entrepreneurship. The behavioral demonstration of transformational leadership elements is believed to influence the recognition of needs for innovation, creation of new vision and mission as well as implementation of change. It was suggested that innovation is determined by interactions of individuals with other people and without the encouragement from managers/leaders, subordinates are likely to terminate their effort (Zhou & Shalley, 2003; Anderson, de Dreu & Nijstad, 2004). Therefore, it is necessary for organizations to continuously innovate to stay profitable in light of the increasing business competition. Nonetheless, little is known about the linkage between transformational leadership and organizational innovation. The strong literature presence and positive outcome of transformational leadership coupled with its suitability in adapting to the demands of changing business world makes this leadership style an appealing one in the near future.

Thus, this research hopes to contribute to the existing literature on transformational leadership and organizational innovation in the context of MNCs based in Malaysia. The following section will elaborate more on the current problem statement.

## **1.2 Problem Statement**

Globalization of economic environment and the increasing demand for varieties of product features, quality and services have pressured companies to change the way organizations function and respond. As a result, innovation effort is needed for organization to stay competitive in the industry and for innovation to take place, organization need effective leaders to transform the people.

The role of leadership as a determinant of organizational creativity and innovation has become more important with the increasing intricacy of work processes and competitive business environment (Dess & Picken, 2000). Furthermore, with rapid technological change, globalization and evolution of product life cycles in today's dynamic environment, organizations cannot afford to ignore the emphasis in striving for creativity and innovation. In fact, organizational creativity and innovation are more important than before for survival, competition, growth and leadership to remain successful in the industry (Jung, Bass, Avolio & Berson, 2003; Tierney, Farmer & Graen, 1999). Current issues facing Malaysian work force is the growing deficits in skills and innovation (Rasiah, 2003). Institutional support mechanisms for innovation were reported to be not on par with capabilities of Singapore, Taiwan South Korea and Japan. Conklin and Cadieux (2006) found that Malaysian firms may lack of the ability to encourage a risk-taking culture. Employees in MNCs such as 3M and Qualcomm are frequently challenged to be creative and it has enabled them to produce innovative and successful outcomes which become their competitive advantage (Jung et al., 2003).

Existing studies reported positive influence of transformational leaders on innovation (Keller, 1992; Waldman & Atwater, 1994) but little literature on organizational innovation focusing on team level was found (West & Farr, 1989; Anderson & King 1990, 2002). According to Mumford, Scott, Gaddis and Strange's (2002) observation, the scarcity of literature on how transformational leadership style affects innovative organizational climate which further led to organizational innovation is surprising although many argued that leadership is essential for innovation to happen. Organizational innovation occurs firstly at individual level and subsequently at team level. Since previous empirical studies mostly examined the effects of leadership role at individual level rather than at organization level (Jung et al., 2003), this study investigate innovation at team level in order to bring individual and organization together. Social and task interdependence are the basis that teams were formed. Achievement of every team member influences the success of the team as a whole which is then lead to organizational success. Team cohesiveness also plays a critical motivational factor in influencing team performance (Weaver, Bowers, Salas & Cannon-Bowers, 1997).

The available literature does not examine the mediating roles such as team cohesiveness in the relationship of transformational leadership and organizational innovation (Gumusluoglu and Ilsev, 2008). However, transformational leaders were found to influence team cohesiveness by promoting higher attachment among members and drawing members closer as a team in achieving shared goals (Korsgaard, Schweiger & Sapienza, 1995). Individualized consideration attributes of transformational leadership seek to understand each team member's skills, characteristics and behaviors thereby driving them towards a cooperative team apart from higher attachment among team members. Consequently, with

motivation and vision components of transformational leaders, effective team cohesiveness can be cultivated so that individuals work together as a team to bring organizational innovation to the next level. As shown in Rabin and Stenhauer (1988) study, team cohesiveness indeed promotes organizational climate which influences innovation

Therefore, it is hoped that the present research on transformational leadership and organizational innovation may be a rewarding direction for further exploration.

### **1.3 Research Objectives**

Organizational innovation has recently received greater attention and emphasis in multinational companies (MNCs) due to the need for new products and service to survive in competitive business environment. However, execution of innovative ideas at organizational level is dependent on various factors such as encouraging an innovative culture. Schein (1992) pointed out that organizational leaders are a key source of influence on organizational culture. Among the leadership styles, it was found that transformational leadership showed positive impact on organizational innovation (Keller, 1992; Waldman & Atwater, 1994).

As most of the researches transpire in the Western countries, this study attempts to study on MNCs in Malaysia based on the following research objectives:

- 1) Investigate the relationship between Transformational Leadership and Organizational Innovation.

- 2) Investigate the relationship between Transformational Leadership and Team Cohesiveness
- 3) Investigate the relationship between Team Cohesiveness and Organizational Innovation
- 4) Investigate if Team Cohesiveness mediates the relationship between Transformational Leadership and Organizational Innovation.

#### **1.4 Research Questions**

Several research questions are posed for the purpose of this study in order to attain the objectives mentioned above.

- 1) How does Transformational Leadership relate to Organizational Innovation?
- 2) How does Transformational Leadership relate to Team Cohesiveness?
- 3) How does Team Cohesiveness relate to Organizational Innovation?
- 4) How does Team Cohesiveness mediate the relationship between Transformational Leadership and Organizational Innovation?

#### **1.5 Significance of study**

There are few empirical studies which examine the link specifically between transformational leadership and organizational innovation (Jung et al., 2003; Gumusluoglu and Ilsev, 2008; Dionne, Yammarino, Atwater & Spangler, 2003). Most of the available literatures are mainly in the context of organizations in western countries and none was found to be specifically in the Malaysian context. Lee and Lee (2006) reported the results from

national innovation surveys in Malaysia which suggests that 21-42% out of the total firms surveyed are innovators. Since transformational leadership is a new paradigm of leadership which has recently become a popular research topic, it is feasible to study how this leadership style influences organizational innovation in Malaysia. Thus, this study will help to fill in the gap of present literature

Scholars have suggested that transformational leadership future research direction should explore into the various mediating roles and linkages with organizational innovation (Gumusluoglu and Ilsev, 2008; Jung et al., 2003; Mumford et al., 2002). They propose that future research should be based on more cross-analysis that takes leadership styles, group norms, various organizational and environmental characteristics, and motivational characteristics into consideration. The reason is that previous studies had focused on organizational innovation as a whole and similar mode of reasoning should apply at the level of organizational subunits. The study on team cohesiveness or team cohesion as a mediator between transformational leadership and organizational innovation is relatively new. It was suggested as one of the group processes for future research in previous literature reviews (Gumusluoglu and Ilsev, 2008; Jung et al., 2003; Mumford et al., 2002). Gumusluoglu and Ilsev (2008) proposed to future researchers that mediating influences such as team cohesiveness would potentially create an impact on the relationship between transformational leadership and organizational innovation.

Based on the proposal of past literature and existing literature gap, the framework of this study is developed with the objective to seek empirical evidence on the mediating effect of team cohesiveness on transformational leadership and organizational innovation at team

level. Hence, this research is perceived be a significant contribution to the literature wherein empirical evidence and findings can be created for academic and management inference purposes. It is hoped that the present study may provide the basis for further exploration in other areas of transformational leadership and organizational innovation.



## 1.6 Definition of Key Terms

### *Transformational Leadership*

Transformational leadership was defined as inspiring followers to commit to a shared vision and goals for an organization or unit. Leaders also challenge subordinates to be innovative problem solvers, and develop followers' leadership capacity via coaching, mentoring, and provision of both challenge and support (Bass & Riggio, 2006).

### *Idealized Influence*

It is an attribute of a transformational leader who is admired, respected, and trusted. Followers tend to identify themselves with the leaders and want to emulate their leaders (Avolio & Bass, 2004)

### *Individualized Consideration*

It refers to the extent to which transformational leaders treat their followers as individuals (Avolio & Bass, 2004).

### *Intellectual Stimulation*

The leader broadens and elevates the interests of his or her employees and stimulates followers to think about old problems in new ways (Avolio & Bass, 1995).

### *Inspirational Motivation*

How effective leaders are at getting followers to attain higher goals and expectations (Avolio & Bass, 1995).

### *Team Cohesiveness*

It is defined as the degree of which members are attracted to their team and desire to remain in it (Michalisin, Karau & Tangpong, 2007).

### *Organizational Innovation*

It is the “tendency of an organization to develop new products or service and to make improvement to the existing ones, in addition to its success in bringing that product / service to the market” (Gumusluoglu and Ilsev, 2008). According to Merriam-Webster online dictionary, *tendency* means direction or approach toward a place, object, effect or limit. Throughout this article, this term is used when referring to group processes, climate and readiness for the tendency of innovation in a team.

## **1.7 Organization of Chapters**

There are five chapters pertaining to this study. An overview of each chapter is as follows:

### **Chapter One – Introduction**

This is an overview chapter of the study which consists of an introduction and a brief background on transformational leadership. This is followed by problem statement, research objectives and research questions of this study which will determine the significance of study. Lastly, the chapter ends with definition of important key terms and the organization of the chapters in this report.

## **Chapter Two – Review of Literature**

Chapter 2 explores the relevant literature of the past related to transformational leadership, organizational innovation and team cohesiveness. It explains the relationships illustrated in the theoretical framework as well as the formulation of hypotheses of this research.

## **Chapter Three – Research Methodology**

This chapter seeks to explain the design employed in this research. It explains the variable, population and sampling, as well as data collection and procedure in order to obtain primary data for this study. The details of the measurements used can be found in this chapter followed by data analysis and summary.

## **Chapter Four – Results**

Chapter 4 outlined the types of analysis conducted on the variables. It illustrates the response rate and the profile of respondents. The highlight of this chapter is the hypotheses testing where a list of hypothesis results are tabulated in the final section of this chapter.

## **Chapter Five – Discussions and Conclusion**

Study Findings, discussion and interpretation of analysis results are summarized in Chapter 5. It gives the readers an understanding of the implications and limitations of this research in addition to providing insight on how researcher can approach future research within the scope of transformational leadership and organizational innovation.

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

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This section discusses on the existing studies which are relevant to this research and provides the basis of this study. Section 2, 3, and 4 constitute a review of relevant past literature on the topics of transformational leadership, team cohesiveness and organizational innovation. Lastly, the theoretical framework of this research and the formulated hypotheses were outlined at the end of the chapter.

#### **2.1 Transformational Leadership**

Leadership was defined in various aspects by different researchers (Bass, 1981). There was no absolute accurate definition of leadership. Jacob and Jaques (1990) described leadership as a process of providing a meaningful direction or purpose to collective effort, and causing willing effort to be expected to achieve purpose. According to Bass (1990), leadership involves interaction among two or more members of a group that frequently engage in structuring or restructuring of situations as well as the perceptions and expectations of members. Anyone in a group or team can demonstrate a certain level of leadership by modifying the motivation of competencies of others in the group.

In the past decade, transformational leadership which has become a new paradigm of leadership has become a popular research subject (Lowe, Kroeck, & Sivasubramaniam, 1996). The theory was originally introduced by Burns (1978). It was further improvised by Bass and Avolio (1995) in which four components had been added to transformational

leadership theory. These interrelated behavioral components include *inspirational motivation* by articulating vision, *intellectual stimulation* by promoting creativity and innovation, *idealized influence* by charismatic role modeling and *individualized consideration* through coaching and mentoring. Based on several research findings, leaders who display these four behaviors of a transformational leadership are flexible in realigning values and norms, as well as promoting both personal and organizational changes (House and Shamir, 1993; Jung and Avolio, 2000). Elkins and Keller (2003) have described those determinants of innovation and creativity such as vision, encouragement; recognition and challenge closely match the behaviors of transformational leadership. Within a large research and development (R&D) organization, Keller (1992) discovered the existence of positive influence of transformational leadership towards the performance of R&D project teams. In a study of 32 Taiwanese companies, Jung et al. (2003) find significantly positive relationship between transformational leadership and organizational innovation as measured by expenditure and the number of patents filed over the preceding three years in R&D department. The positive impact of transformational leaders on innovation has been supported by several empirical studies such as Keller (1992) as well as Waldman and Atwater (1994).

Many researches (Avolio & Bass, 1991; Lowe, Kroeck, & Sivasubrahmaniam, 1996; Stevens, D'Intino, & Victor, 1995) had consistently reported the characteristics of transformational leadership as more effective, productive and innovative. Followers tend to be more satisfied with this leadership style which demonstrates shared visions, mutual trust and respect. Transformational leadership and charismatic leadership are very much in common but charisma is only a part of transformational leadership (Bass & Riggio, 2006). Although some studies argued that transformational leadership differed from charismatic

leadership (House & Shamir, 1993; Yukl, 1999), these two leadership styles were regarded as the same by many researchers due to the ambiguity and lack of consistency in comparing both styles (Avolio & Yammarino, 2002; Antonakis & House, 2002).

Burns (1978) looked at TL as uni-dimensional. In a later year, Bass (1985) had eventually extended it in an effort to examine the dimensions within transformational leadership and the resulting outcome was the development of the first measurement for transformational leadership called the Multifactor Leadership Questionnaire (MLQ). Among the many measurements for transformational leadership were Burke's (1994) Leadership Assessment Inventory (LAI), Alban-Metcalfe and Alimo-Metcalfe's (2000) Transformational Leadership Questionnaire (TLQ), and the Global Transformational Leadership scale (GTL) developed by Carless, Wearing and Mann (2000).

The most widely accepted and validated measurement for transformational leadership is the MLQ (Bass & Riggio, 2006). The MLQ which is available in many languages other than English has been completed by more than 15, 000 respondents. It has also demonstrated good to excellent internal consistency in its scales. Bass and Avolio (1995) further improvised the MLQ to examine the four aspects of transformational leadership namely idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration. Section 2.1.1 to 2.1.4 reviewed the four dimensions of transformational leadership.

### *2.1.1 Idealized Influence*

According to the definition of Avolio and Bass (1994, 2004), leaders with idealized influence behavior are well-admired, respected and trusted by followers who want to be associated with them. Leaders also put others above themselves, shares risks with followers and often act as role models. Idealized influence is also known as charisma by Burns (1978). Moral and ethical conducts are highly regarded by these leaders (Northouse, 1997, p. 134). Evidence showed the effect of this transformational leadership characteristic among followers by their demonstration of sensible risk taking after being paired with transformational leaders (Chatman & Cha, 2003; King & Anderson, 1995). The confident personality and self-efficacy of such leaders in turn affect how the followers feel about their own capabilities. Although idealized influence was considered as the most important component of transformational leadership (Bass, 1990), it does not suffice to measure the profundity of transformational leadership.

### *2.1.2 Inspirational Motivation*

Key characteristics of inspirational motivation include articulating a compelling vision, expressing confidence in achieving goals, talking optimistically and enthusiastically about the future along with the needs to be accomplished (Avolio and Bass, 2004). The use of inspirational motivation through team's identification with the organization's vision and mission increase team members' initiatives to perform beyond expectations. The heightened levels of motivation is linked towards higher levels of performance (Shamir, House, & Arthur, 1993) which likely to enhance organizational innovation. Leaders challenge followers

in meaningful ways and demonstrate commitment in attaining goals and shared visions. Apart from being consistently included in inspirational motivation dimension of transformational leadership, the articulation of organizational vision item is also reported to have correlation with promoting innovation (Pierson, 1994; Schin & McClomb, 1998). As cited in Avolio and Bass (2004) article, articulating a vision involves preparing followers to achieve the vision through embracing change and expressing optimism, confidence and enthusiasm.

### *2.1.3 Individualized Consideration*

Individualized consideration behavior of a leader is demonstrated by several key aspects such as offering support and care for their followers as well as providing growth in followers' professional development. These leaders acknowledge individual differences and consider each individual as having diverse needs, strengths and limitations. It was suggested in a previous study that growth opportunities is the heart of transformational leadership because growth augments commitment and task competency (Bass & Riggio, 2006). Bass (1990) and Yukl (2002) found only a weak effect of this dimension on follower's motivation and no relationship to innovation (Shin & McClomb, 1998). However, there were other studies which showed positive relationship with organizational factors such as organizational change (Rafferty & Griffin, 2006). Conger (1999) found that this dimension of transformational leadership builds followers' self-confidence and personal development which will subsequently lead to empowerment of followers.



#### *2.1.4 Intellectual Stimulation*

Finally, intellectual stimulation was described as a behavior which causes emotions arousal among strong followers (Yukl, 2006). It encourages followers to be innovative and creative in solving problems, challenging status quo, as well as promoting and sharing of new ideas (Avolio & Bass, 2004). According to Morales, Reche and Torres (2008) intellectual stimulation refers to the behavior of a leader who promotes the intelligence of the employees, knowledge and learning to cultivate innovation in problem-solving and solutions. Leaders exhibit environmental sensitivity and identify innovation possibilities through careful evaluation of environment (Conger & Kanungo, 1998). Baruch and Lessem (1995) described the innovator managers as originator and creator of new things who possess an inner compulsion that is projected unto others by powerful and visually expressive imagination. They emerge as inventors and visionaries who inspire team members. Woodman et al (1993) stated that creation of value-added new products/services within an organization context is the results of organizational innovation.

Generally, transformational leadership is associated to a higher level of performance. Recent studies reported this leadership style having a positive effect on performance of employees (Kahai, Sosik & Avolio, 2000), groups (Parry & Proctor – Thomson, 2003), and organization (Geyer & Steyrer, 1998; Howell & Avolio, 1993). Although Jung et al. (2003) believes the bright prospective for transformational leaders to influence the organization creativity positively, there is presently little empirical studies that research on the existence and nature of this relationship (Mumford et al, 2002).

As cited by Dionne et al. (2003), team factors such as cohesion and conflict management can be influenced by transformational leadership (Atwater & Bass, 1994). Subsequent section provides an in depth review of past literature on team cohesiveness.

## **2.2 Team Cohesiveness**

Salas, Dickinson, Converse and Tannenbaum (1992) defined team as dynamic, interdependent, and adaptive interaction among distinctive set of two or more people with specific roles or function, who work towards a shared and valued goal, objective, or mission. Based on previous literature review, team can be characterized into common characteristics such as two or more individuals; common goals; and task interdependency.

In general, interpersonal attraction, task commitment, and group pride are considered to be the three main component of team cohesiveness (Beal, Cohen, Burke, & McLendon, 2003; Mullen & Copper, 1994). Festinger (1950) defined team cohesiveness or team cohesion as the forces which act upon the members to stay in a group. Other definition of team cohesion was “the dynamic process which reflected in the tendency for a group to stick together in pursuit of its goals and objectives” (Carron, 1982, p. 123). Although there were many ways to define and operationalize the complexity of team cohesiveness, (Michalisin et al., 2007) reported that member’s attraction to the team and desire to remain in the group was the emphasis of most theoretical and empirical treatments.

According to Dionne et al., (2003), the four behavioral components of transformational leadership may be mapped to critical teamwork process factors. For example, components of transformational leadership have been mapped to promote team cohesiveness. In the past empirical studies, such leadership style has been linked to cohesion as reported by Carless, Mann, and Wearing (1995) who found cohesion as the mediator between transformational leadership with financial performance of Australian Banks. Dionne et al. (2003) suggested that visioning and charismatic components of transformational leadership impact cohesion. It involves building rapport (Sullivan, 1988) and reinforcement of group's collective identity (Shamir et al., 1993). The shared pride and commitment from team members to the leader can potentially increase team cohesion due to the sense of privilege to be associated with the transformational leader (Atwater and Bass, 1994, p. 48). Prior research has shown that transformational leaders who demonstrate consideration for followers resulted in higher degree of attachment of followers to the group, thus drawing the group closer towards the attainment of group goals (Korsgaard, Schweiger, & Sapienza, 1995). Stashevsky and Koslowsky (2006) expected that team cohesiveness could be enhanced by a transformational leader who emphasizes on motivation and stimulation.

Among various theoretical models of team cohesion, the model developed by Carron, Widmeyer and Brawley (1985) was found to be of most relevance to teams in this study. It has shown to be both reliable and valid as well as being widely used in measuring cohesion as the GEQ can be modified to suit other requirements (Dion, 2000). This model separated team cohesion into four distinct dimensions where group (group integration) and individual (individual attraction to group) components had two dimensions each. Group integration was divided into task and social dimensions respectively. The group component measured the

integration perception level of an individual and familiarity within the team while the individual component measures the level of an individual's personal commitment and association with the team. Hence, based on Carron et al.'s (1985) model, the resulting four dimensions were:

1) Group integration – task

The individual's feeling about similarity, closeness and bonding within the team as whole around the group's task.

2) Group integration – social

The individual's feeling about similarity, closeness and bonding within the team as a whole around the group's social activities.

3) Individual attraction to the group – task

The individual's feelings about his or her personal involvement with the group task, productivity and goals and objectives.

4) Individual attraction to the group – social.

The individual's feelings about his or her personal acceptance, and social interaction with the group members.

According to Zaccaro (1991), distinction between task and social cohesion was empirically supported and both were suggested to show different relations with team performance. A number of previous literature exhibited task cohesion to be empirically

linked to team performance (Williams & Widmeyer, 1991; Mullen & Copper, 1994; Beal et al., 2003). As cited by (Michalisin et al., 2007), internal attributions could be enhanced by team cohesiveness which in turn influence team members to perceive themselves as being responsible for performance outcomes. Cohesion, as stated by Weinberg & Gould (1995) is complex and is caused by several factors namely leadership (quality, influence and experience), team (desire for success), personal (individual characteristics), environmental (expectations and obligations), group size, and time spent together. Recent studies had shown empirical evidence on the impact of team cohesiveness.

Team cohesion as noted by Weaver et al. (1997) in past empirical research is a critical motivational factor influencing team performance. It also plays a central role in organizational learning in firms, bridging organizational and individual learning. Organizational innovation also depends on whether the team has committed members who are cooperative and demonstrate willingness to go beyond the distant in executing or implementing innovative ideas. Organizational performance was also found to have improved through team cohesion. In Wang, Ying, Jiang and Klein (2006) study of group cohesion in organizational innovation during implementation phase of the enterprise resource planning systems, they found positive relationship between group cohesion and meeting management goals.

Montes et al. (2005) found that teamwork cohesion promotes organizational learning which subsequently encourages administrative innovation. In the study of Rabin & Steinhauer (1988), staff cohesiveness was considered as an organizational climate which influences innovation. Little (1965) found that implementation of innovation worked best

when a collaborative atmosphere existed whereby team members have mutual confidence, trust and personal associations among each other. In another similar study conducted among management team's leadership style, team cohesiveness was found to be important for innovation. It was argued that when the environment is amiable and mutually supportive, ease and frequency of communication could be enhance, thereby allowing innovation to take place (Becker & Stafford, 1967).

### **2.3 Organizational Innovation**

Previous literature had defined organizational innovation in terms of improvement on technology, management practices, and administrative processes (Joahnessen, Olsen & Lumpkin, 2001; Drejer, 2004). Woodman et al. (1993, p. 293) defined organizational innovation as “the creation of valuable, useful new product, service idea, procedure, or process by individuals working together in a complex social system”. This research aims to study organizational innovation in terms of its teamwork, capacity and climate for innovation. Gianikis and McCue (1997) observed a commonly shared theme which defined organizational innovation as transformation of knowledge into new products, processes, and services to gauge competitive advantage.

Although definition of innovation may varied across studies, an informal definition of innovation defines the term as behavioral and social processes which seek to achieve changes. Process and products which are regarded as innovations include technological changes, processes, and services within an organization. It is an introduction of a new and improved ways of doing things at work (West, 2002). Innovations may differ from creating

minor impact to creation of great significance. A more complete definition of innovation given by West and Farr (1990) was *“the intentional introduction and application within a job, work team or organization of ideas, processes, products or procedures which are new to that job, work team or organization and which are designed to benefit the job, the work team or the organization”*

According to Subramaniam (2005), innovation can be viewed as process of interaction between individuals, organizations and the environment in which the importance of organizational environment on innovation process is emphasized. In an effort for innovation to happen at these levels, Gassman (2001) highlighted the importance of innovation climate at workplace. Amabile (1988) had attempted to understand organizational innovation from the perspective of individual and team. Individual innovation was influenced by motivation to explore and manipulate environment or being held back due to workplace insecurity (West and Atlink, 1996). Group / team innovation achieved higher effectiveness, innovation and creativity through a collective of people with diverse skills in the workplace. Depending on size, organizational innovation may vary in terms centralized control and greater autonomy for individuals, teams and departments.

For the purpose of this study, organizational innovation refers to innovation at the team level which focused on the factors that promote innovation within the team. Anderson and King (1990) defined team innovation as a group of people working together to introduce and implement new ideas through interpersonal discussions and reshaping of ideas over time. The four facet-specific team climates for innovation originally introduced by West (1990) were participative safety, vision, support for innovation and task orientation. Based on these