ผลกระทบของพฤติกรรมผู้นำและวัฒนธรรมองค์การที่ส่งผลต่อการพัฒนาองค์กรแห่งการเรียนรู้: กรณีศึกษาโรงพยาบาลภาครัฐและเอกชนที่ผ่านการรับรองคุณภาพโรงพยาบาล

EFFECTS OF LEADERSHIP BEHAVIORS AND ORGANIZATIONAL CULTURE RESULT IN THE DEVELOPMENT OF LEARNING ORGANIZATION: A CASE STUDY OF PRIVATE AND PUBLIC HOSPITALS WITH HOSPITAL ACCREDITATION

By

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Sirirat Chamnanarongsak

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ชื่อเรื่องวิจัย : ผลกระทบของพฤติกรรมผู้นำและวัฒนธรรมองค์การต่อการพัฒนาองค์กรแห่งการเรียนรู้: กรณีศึกษาโรงพยาบาลภาครัฐและเอกชนที่ผ่านการรับรองคุณภาพโรงพยาบาล

ผู้วิจัย : นางสาว ศิริรัตน์ ชำนาญณรงค์ศักดิ์

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การวิจัยเรื่องพฤติกรรมผู้นำและวัฒนธรรมองค์การที่มีอิทธิพลต่อองค์กรแห่งการเรียนรู้: กรณีศึกษาโรงพยาบาลภาครัฐและเอกชนที่ผ่านการรับรองคุณภาพโรงพยาบาล มีจุดมุ่งหมายเพื่อศึกษาความสัมพันธ์ของพฤติกรรมผู้นำที่มีภาวะผู้นำแบบเปลี่ยนสภาพ (Facilitator, Mentor, Innovator และ Broker Role) และภาวะผู้นำแบบแลกเปลี่ยน (Producer, Director, Coordinator และ Monitor Role) และแบบวัฒนธรรมองค์การ (Achievement, Support, Role และ Power-oriented culture) ที่มีอิทธิพลต่อองค์กรแห่งการเรียนรู้ ของโรงพยาบาลภาครัฐและเอกชนที่ผ่านกระบวนการการพัฒนาและรับรองคุณภาพโรงพยาบาล โดยมีวัตถุประสงค์ดังนี้ 1) เพื่อตรวจสอบความสัมพันธ์ของพฤติกรรมผู้นำที่มีอิทธิพลต่อการพัฒนาองค์กรแห่งการเรียนรู้ ตามการรับรู้ของผู้บริหาร 2) เพื่อค้นหาขนาดอิทธิพลทางตรงของพฤติกรรมผู้นำที่มีต่อองค์กรแห่งการเรียนรู้ตามตามการรับรู้ของผู้ใต้บังคับบัญชา 3) เพื่อตรวจสอบความสัมพันธ์ของวัฒนธรรมองค์การที่มีอิทธิพลต่อการพัฒนาองค์กรแห่งการเรียนรู้ ตามการรับรู้ของผู้ใต้บังคับญชา 4) เพื่อเปรียบเทียบขนาดอิทธิพลทางอ้อมของพฤติกรรมผู้นำและแบบวัฒนธรรมองค์การที่มีผลต่อองค์กรแห่งการเรียนรู้ตามตามการรับรู้ของผู้ใต้บังคับญชา 5) เพื่อตรวจสอบความกลมกลืนของโมเดลการวิจัยกับข้อมูลเชิงประจักษ์ในภาพรวมของพฤติกรรมผู้นำ วัฒนธรรมองค์การ และองค์กรแห่งการเรียนรู้

กลุ่มตัวอย่างที่ใช้ในการวิจัยครั้งนี้แบ่งเป็น 2 กลุ่มได้แก่กลุ่มที่หนึ่งเป็นกลุ่มตัวอย่างที่ผู้วิจัยแจกแบบสอบถามได้มาจากการสุ่มแบบเจาะจงซึ่งเป็นผู้บริหารและผู้ใต้บังคับบัญชาที่เกี่ยวข้องกับโครงการพัฒนาคุณภาพโรงพยาบาล ทั้งโรงพยาบาลภาครัฐและภาคเอกชน 9 แห่งที่ผ่านการรับรองคุณภาพโรงพยาบาล ตั้งแต่ปี พ.ศ. 2538 จำนวน 800 คน และได้รับแบบสอบถามคืน จำนวน 550 ฉบับ กลุ่มที่สองเป็นกลุ่มตัวอย่างที่ผู้วิจัยสัมภาษณ์แบบกึ่งโครงสร้างได้มาจากการสุ่มแบบเจาะจง ซึ่งเป็นผู้บริหารโรงพยาบาล ทั้งภาครัฐและเอกชน 8 แห่ง

สถิติที่ใช้ในการวิจัยครั้งนี้ได้แก่

1) สถิติการวิเคราะห์ถดถอยพหุแบบขั้นตอนเพื่อตรวจสอบความสัมพันธ์ของพฤติกรรมผู้นำที่มีอิทธิพลต่อองค์กรแห่งการเรียนรู้ ตามการรับรู้ของผู้บริหาร ผลการศึกษาวิจัยครั้งนี้พบว่าการรับรู้ของผู้บริหารทั้งโรงพยาบาลภาครัฐและภาคเอกชนมีพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Producer role มีอิทธิพลต่อองค์กรแห่งการเรียนรู้ 20% เมื่อพิจารณาองค์ประกอบย่อยขององค์กรแห่งการเรียนรู้ พบว่าพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Producer role มีอิทธิพลต่อระบบการจัดการความรู้ในองค์กรแห่งการเรียนรู้ 29%

2) การสังเคราะห์ข้อมูลที่ได้จากการสัมภาษณ์แบบกึ่งโครงสร้างเกี่ยวกับวัฒนธรรมองค์กร พบว่าผู้นำส่วนใหญ่เชื่อว่ากระบวนการเรียนรู้การพัฒนาคุณภาพโรงพยาบาล ทำให้มีการเปลี่ยนพฤติกรรมการทำงานของบุคลากรเป็นที่สังเกตุได้ชัดเจน วัฒนธรรมองค์กรภายหลังผ่านกระบวนการรับรองคุณภาพโรงพยาบาลมีการเปลี่ยนแปลงในระดับหนึ่ง

3) การวิเคราะห์โมเดลลิสเรล (LISREL) เพื่อค้นหาขนาดอิทธิพลทางตรงและทางอ้อม ของพฤติกรรมผู้นำที่มีต่อองค์กรแห่งการเรียนรู้ตามตามการรับรู้ของผู้ใต้บังคับบัญชา ผลการศึกษาวิจัยครั้งนี้พบว่าการรับรู้ของผู้ใต้บังคับบัญชาของโรงพยาบาลเอกชน รับรู้ว่าพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Director role และพฤติกรรมผู้นำแบบเปลี่ยนสภาพที่ใช้บทบาทBroker role มีอิทธิพลโดยตรงต่อการพัฒนาองค์กรแห่งการเรียนรู้ และพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Coordinator Role มีอิทธิพลโดยอ้อมต่อการพัฒนาองค์กรแห่งการเรียนรู้โดยผ่านวัฒนธรรมองค์การแบบมุ่งผลสำเร็จ (Achievement-oriented culture) และวัฒนธรรมองค์การแบบสนับสนุนเกื้อกูล (Supportive-oriented culture) ตามลำดับ ส่วนการรับรู้ของผู้ใต้บังคับบัญชาของโรงพยาบาลรัฐรับรู้ว่าพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Producer และ Director Role มีอิทธิพลโดยตรงต่อการพัฒนาองค์กรแห่งการเรียนรู้และพฤติกรรมผู้นำแบบเปลี่ยนสภาพที่ใช้บทบาท Mentor role และพฤติกรรมผู้นำแบบแลกเปลี่ยนที่ใช้บทบาท Director Monitor และCoordinator Role มีอิทธิพลโดยอ้อมต่อ การพัฒนาองค์กรแห่งการเรียนรู้โดยผ่านวัฒนธรรมองค์การแบบมุ่งผลสำเร็จ (Achievement-oriented culture)และวัฒนธรรมองค์การแบบสนับสนุนเกื้อกูล(Supportive-oriented culture) ตามลำดับ และ มีอิทธิพลทางอ้อมต่อองค์กรแห่งการเรียนรู้โดยผ่านวัฒนธรรมองค์การแบบมุ่งผลสำเร็จ (Achievement-oriented culture)และวัฒนธรรมองค์การแบบกฎระเบียบ (Role-oriented culture) ตามลำดับ อย่างไรก็ตามวัฒนธรรมองค์การแบบใช้อำนาจบังคับ (Power-

oriented culture) ไม่ส่งผลให้เกิดการพัฒนาองค์กรแห่งการเรียนรู้ทั้งในโรงพยาบาลภาครัฐและเอกชนที่ผ่านการรับรองคุณภาพโรงพยาบาล

ผลการศึกษาวิจัยครั้งนี้ยังพบว่าแบบจำลององค์กรแห่งการเรียนรู้ของโรงพยาบาลภาคเอกชนสามารถอธิบายได้ 42% ส่วนแบบจำลององค์กรแห่งการเรียนรู้ของโรงพยาบาลภาครัฐสามารถอธิบายได้ 49% ดังนั้นแบบจำลององค์กรแห่งการเรียนรู้ของโรงพยาบาลเอกชนและรัฐที่ผ่านการรับรองคุณภาพโรงพยาบาลมีความกลมกลืนของโมเดลกับข้อมูลเชิงประจักษ์ในภาพรวมตามสมมุติฐานที่กำหนดไว้ ผลการศึกษาชี้ให้เห็นว่ามีความสัมพันธ์เชิงสาเหตุของพฤติกรรมผู้นำส่งผลโดยตรงต่อองค์กรแห่งการเรียนรู้ และ ส่งผลทางอ้อมต่อองค์กรแห่งการเรียนรู้โดยผ่านการรับรู้วัฒนธรรมองค์การ

ในการวิจัยครั้งนี้ผู้วิจัยได้ศึกษาแบบจำลององค์กรแห่งการเรียนรู้ตามการรับรู้ของผู้ใต้บังคับบัญชาเท่านั้น ดังนั้นในการทำวิจัยครั้งต่อไปควรทำการเก็บข้อมูลพฤติกรรมผู้นำ วัฒนธรรมองค์การ และองค์กรแห่งการเรียนรู้ในผู้บริหารโรงพยาบาลเพื่อที่จะเปรียบเทียบและวิเคราะห์ความแตกต่างระหว่างแบบจำลององค์กรแห่งการเรียนรู้ตามการรับรู้ของผู้บริหารและผู้ใต้บังคับบัญชา

ในการวิจัยครั้งนี้ผู้วิจัยศึกษากลุ่มตัวอย่างเฉพาะโรงพยาบาลเอกชนและรัฐที่ผ่านการรับรองคุณภาพโรงพยาบาลเท่านั้น ข้อเสนอแนะในการทำวิจัยครั้งต่อไปควรศึกษาในองค์กรอื่นๆ เช่น สถาบันการศึกษา เช่น อุดมศึกษาที่ผ่านการรับรองคุณภาพองค์กร และควรติดตามและศึกษาในกลุ่มตัวอย่างเดิมว่าสามารถธำรงรักษาองค์กรแห่งการเรียนรู้

ข้อเสนอแนะในการนำผลวิจัยไปใช้เป็นแนวทางให้หน่วยงานพัฒนาทรัพยากรมนุษย์ในการพัฒนาภาวะผู้นำของบุคคลในโรงพยาบาลรัฐและเอกชน รวมทั้งเป็นแนวทางในการพัฒนาองค์กรให้มีความยั่งยืนขององค์กรแห่งการเรียนรู้โดยบริหารวัฒนธรรมองค์การของโรงพบาลให้มีแบบมุ่งผลสำเร็จและแบบเกื้อกูล หรือแบบมุ่งผลสำเร็จและแบบกฎระเบียบ

ABSTRACT

Title of Dissertation	**:**	Effects of Leadership Behaviors and Organizational Culture on the Development of a Learning Organization: Case Study of Private and Public Hospitals with Hospital Accreditation
Author	**:**	Ms. Sirirat Chamnannarongsak
Degree	**:**	Doctor of Philosophy (Development Administration)
Year	**:**	2004

The purpose of this study is to understand the relationship between roles of transformational and transactional leadership behaviors, types of a current organizational culture, and attributes of the learning organization in both private and public certified and accredited hospitals. The study has the following four objectives: 1) to test the relationship between leadership behaviors as perceived by administrators and the learning organization and each of its attributes, 2) to determine how much variation and what direct effect leadership behaviors have on learning organizations as perceived by subordinates, 3) to determine how much variation types of current organizational culture (achievement, support, role, and power–oriented culture) have on learning organizations, including both private and public hospitals, 4) to compare variations in indirect effects of leadership behaviors on learning organizations with regard to types of current organizational culture as perceived by subordinates, and 5) to confirm and compare the path analysis of a theoretical model showing subordinates perceived causality between eight roles of leadership behavior, four roles of a current organizational culture, and the development of a learning organization.

The quantitative study utilized information from eight hundred healthcare professions systematically selected from nine hospitals in both sectors having been certified and accredited with HA since 1995. Five hundred and fifty respondents from different levels and jobs involved with quality improvement programs completed the questionnaire that was sent to them.

Multiple regression using a stepwise technique was utilized for analyzing hospital's chief executive perception of the eight roles of transformational and transactional leadership behaviors and to determine variance in the development of a learning organization. The results indicated that chief executives in both private and public hospitals viewed themselves as leaders performing transactional leadership behavior, with the producer role explaining 20% of the variance in the development of a learning organization. Regarding the significant relationship of each attribute of a learning organization, transactional leadership role of producer was a significant predictor of knowledge system and explained 29% of the variation. Chief executives with producer role, thus emphasized the knowledge system, that is, the development of new knowledge and insights that have the potential to influence behavior. The study also conducted semi-structured interviews with the chief executives of the hospitals to obtain their perception on the current organizational culture to gain insight about how the organizational culture has changed over time since they have participated in HA.

For the subordinate's perception of both two sectors, this study used quantitative techniques through a questionnaire survey. Descriptive statistics and structural equation modeling (SEM) based on LISREL methodology were applied to analyze the results. Direct and indirect effects were examined. The private hospitals' learning organization model indicates that the development of a learning organization was directly influenced by transactional leadership (the director role) and transformational leadership (the broker role), regardless of the nature of organizational culture. For the public hospitals' learning organization model, it indicates learning organization was directly influenced by transactional leadership (the producer and director role), regardless of organizational culture. Furthermore, the private hospitals' learning organizational model illustrates that the development of a learning organization from learning the process of how to initiate and implement hospital accreditation successfully is indirectly affected by leaders using the coordinator role through the achievement culture and the supportive culture respectively. The public hospitals' learning organization model indicates that the development a learning organization is indirectly influenced by transformational leadership (the mentor role) and transactional leadership (the director, coordinator,

and monitor role) via achievement–oriented culture and supportive culture or via achievement–oriented culture and role-oriented culture respectively. Consequently, 42% of the variation in private hospitals' learning organization model and 49% of the variation in public hospitals' learning organization model were explained.

Finally, the learning organization model in both private and public hospitals was found to adequately fit the hypothesized structural model with the satisfactory goodness-of-fit level. In addition, the results indicate the learning organization would not exist without the two supporting foundations of appropriate leadership behavior and organizational culture. Thus, the findings suggest that leadership behavior influences the organizational culture and is deemed an appropriate starting point in the casual relationship model. It confirms a theoretical model claiming that subordinates of both sectors see causality between leadership behaviors, a current organizational culture, and a learning organization.

For future research, it is recommended to replicate the study but also include the measurement of a current organizational culture as perceived by the leaders. Thus, the replicated study will be able to compare and confirm two causal models of the development of a learning organization between leader's perception and subordinate's perception. With in this regard, the results of the future study will show whether or not a discrepancy exists between them. Moreover, replication of this study in other organizations such as educational institute would be useful. A follow-up study after several years of HA would indicate whether or not the attributes of a learning organization have been sustained in these hospitals.

The results of the study also point to two important practical implications for organizational policy and human resource management. First, the training program for leaders is in organizational culture management because the development of a learning organization gained from learning how to implement quality improvement will be not sustained, unless culture of hospital change. The culture change process is recommended. The second implication on this study includes a leadership training and development program for chief executives of both private and public hospital.

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CHAPTER 1

INTRODUCTION

Large numbers of leaders are seeking an effective strategy for organizational improvement that will help their organizations in adapting to an ever-changing environment. It would seem that the learning organization is ideally suited to meet this need. Why a learning organization? Why do we need learning organizations? There are at least two reasons and they are interrelated. The first is survival. The second reason is excellence. These two reasons for learning organizations are interrelated because an organization must achieve excellence in order to survive. By achieving excellence, the organization will enhance its chances of surviving (Hitt, 1996: 16-25).

It seems evident that the learning organization is a paradigm shift from the more traditional organization. Indeed, it is a paradigm shift of the higher order. We are witnessing the emergence of a radically new perspective on organizations: how they should function, how they should be managed, and how they should cope with change. This century has witnessed the emergence of three quite different organizational paradigms. In the early part of the century, Max Weber wrote extensively about the nature of the bureaucratic organization- a paradigm that focused on rationality and efficiency (Weber, 1947 Quoted in Robbins, 1990: 37). Then, in mid-century, Drucker (1964 Quoted in Quinn, et al., 2003: 32) introduced the concept of the performance-based organization- a paradigm that promised results and effectiveness. In 1990, the publication of The Fifth Discipline created tremendous interest in what author Peter Senge called “the learning organization” (Senge, 1990). He stressed the importance of the learning organization in creating and sustaining

organizational change and in helping organizations retain a competitive capacity in the "age of the knowledge industry". These three different paradigms highlight three important aspects of all organizations: efficiency, effectiveness, and learning. Efficiency has been defined as "doing things right", while effectiveness is "doing the right things". Learning involves continually expanding the organization's capacity to do the right things and to do the things right. Thus, the learning organization retains the essential features of the two previous paradigms. In order to become a learning organization, a behavioral change is required by people within the organization, which will affect what, and/or how, operations or tasks are performed. Behavioral change, which leads to performance improvement, will be achieved by a process of learning from members in the organization (Buckler, 1998: 15-17). Thus, learning, as evidenced through organizational change, for the purposes of this research study, has been defined as "a process that results in changed behavior in ways that lead to improved performance" (Argyris, 1992). This definition is appropriate to the context in which the learning organization is being studied, and can be applied for learning at an individual, team, or organizational level. One of the components of the learning organization is the development of the ability to learn continuously in order to improve processes and products.

"We can build 'Learning Organizations' where people continually expand their capacities to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together." (Senge, 1990: 3)

Several studies have found that competitive performance is linked to a firm's ability to adapt to major changes in the environment and by implication, in their level of learning (Appelbaum and Reichart, 1997: 225-239). From these studies, most companies would like to know their industry trends, whether their learning ability is sufficient to remain competitive, and if not, what can be done to improve their learning ability. Therefore, the concept of the learning organization has begun to be recognized as a tool for continuous improvement because the development of the ability to learn continuously can improve processes and products.

National Health Care Reform in Thailand has made good progress towards improving the health of the nation as a whole; however, the call now is for a re-

orientation of the health care sector by reshaping the way services are planned and delivered. The Institute of Hospital Accreditation Thailand (HAT) has a major effect on how hospitals operate. HAT inserts standards that mandate hospitals to engage in continuous quality improvement. Continuous improvement requires a management paradigm shift: from profit maximization to serving customer needs by providing goods and services of the highest quality; from static cost minimization to dynamic optimization; from hierarchical structure to self management; from productivity maximization through specialization on the basis of comparative advantage to system-based optimization with emphasis on dynamic performance and; from individual learning to team and organizational-based learning (Dean and Bowen, 1994).

1.1 The Learning Organization and Quality Improvement: The Context of the Study

The most important philosophy of the quality improvement process and hospital accreditation is the learning process (The Institute of Hospital Quality Improvement and Accreditation, 2004). Healthcare organizations (primarily hospitals) have been under pressure from insurers and third party players to reduce costs and improve outcomes. Patient outcomes, whether a patient lives or dies, recovers or becomes more ill, are in a very real sense the products of a health care organization. The most compelling motivator for establishment of quality improvement programs has been the mandate from the Institute of Hospital Accreditation Thailand (HAT). Although accreditation from HAT is voluntary, many hospitals feel compelled to request accreditation and comply with HAT standards. Their reasons for doing so include requirements from third party payers, reputation in the community, competition and public relations.

Accreditation is a detailed comparison of an organization's services and method of operation against a set of national standards. The Thailand Council on Health Services Accreditation has a two-part accreditation process. The first part involves self-assessment; the organization seeking accreditation measures its own compliance against national standards. Key areas examined during the accreditation process include client/patient care and the delivery of service, information

management practices, human resource development and management, the organization's governance, and the management of the environment. Surveyors from outside the organization then undertake the accreditation survey and use the same national standards to independently measure the performance of the organization. HAT has a comprehensive list of standards that must be met if the health care organization is to receive accreditation. For each standard, there are criteria to determine if the standard is being met. Examples of evidence of performance are given to guide health care staff in preparing for an accreditation visit and review. The findings from the survey are summarized in a written report and focus on the organization's strengths and weaknesses. Recommendations are made to help the organization develop plans to improve areas which are weak and maintain areas which are strong.

National attention has been focused on health care in recent years, particularly on the aspects of quality and cost. Prior to the issuance HAT standards for quality improvement, most hospitals had quality assurance programs in place. In addition to quality assurance programs, most hospitals have had in place other programs designed to monitor certain areas and processes. These programs often have included infection control, utilization review, and safety and risk management. Infection control officers, as the name implies, sought to identify sources of infection, including hospital acquired (nonsocomial) infections, and prevent their spread. Safety programs deal with worker’s compensation, hazardous materials, HAT regulations, and other aspects of plant and equipment maintenance. Risk management seeks to identify and minimize potential exposure to liability for the hospital and malpractice for the hospital’s professional staff. Most of quality improvement activities for seeking hospital accreditation (HA) employ the Total Quality Management (TQM) philosophy as a tool for success.

Since hospitals frequently describe their efforts in quality improvement as “total quality management” or “continuous quality improvement (CQI)” one might wonder whether these activities qualify as attempts at becoming learning organizations. It can be argued that they are indeed learning organizations. Although hospitals usually do not term their quality improvement efforts as moving towards a “learning organization”, it is clear that TQM and CQI plans involve inquiry into a

problem and efforts to institutionalize the change resulting from learning. According the established criteria of HA, consisting of six areas, the activities of quality improvement such as CQI seek to improve quality through the use of interdisciplinary teams, thus involving a variety of persons within the hospital staff. This concept begins the extension of the idea that quality is the responsibility, not of a few persons, but of every person in the hospital. Therefore, individual, team, and organizational learning is an important part of quality improvement. As Peter Senge (1990: 12-13) concluded, successful organizations need to have the five disciplines developing an ensemble. The most important discipline is a systematic thinking approach because it needs the disciplines of building shared vision, mental model, team learning and personal mastery to realize its potential. Without the system thinking, it is difficult to develop an organization.

So, continuous quality improvement shares common ground with the learning organization and is in reality an example of a learning organization. Reports on a theoretical framework based on Senge's principles and the Malcolm Baldrige National Quality Award (MBNQA) criteria provided evidence that the learning organization and quality improvement are mutually dependent. Qualitative data were gathered from five Australian companies that had established practices in the TQM field. A multiple cross-case content analysis was undertaken to evaluate the proposition that "TQM and learning organizations are mutually dependent". The major research finding was that TQM principles and concepts strengthen the evolution of the learning organization. Organizations need to recognize that their continuous improvement activities, as a part of TQM philosophy, have created their "learning organization" (Tervziovski, et al., 2000: 23-31). Because this research study confirms that the purpose of quality improvement and the concept of the learning organization are to continually improve the organization, then data need to be gathered, not only about processes being improved or receiving accreditation, but also about the overall process driving improvement, that is, organizational learning. Consequently, HAT has mandated that health care organizations establish programs of continuously assessing and improving quality. These programs generally involve teams of health care employees gathering data to solve a problem or improve a process. Thus, health care employees are required to learn how to assess and

implement quality improvement programs. It can certainly be said that quality improvement programs can facilitate and enhance a learning organization. It also can be a component of learning organizations in health care and other organizations because quality improvement programs are one way in which learning organizations occur. For the above-mentioned programs, the attributes of the learning organization in hospitals, certified and accredited from HAT, are essential to be studied.

1.2 Statement of the Problem

While the constructs of the learning organization, leadership behaviors, and organizational culture have received much attention in recent decades, the empirical research that demonstrates the relationship between these three constructs is limited, especially research studies in health care organizations that have a quality system in place.

Most organizational experts believe that an essential ingredient of successful organizational change and maintaining sustainable organizational change occurs in learning organizations. In today's competitive environment, the degree of change occurring with health care systems across Thailand and around the globe raise a number of questions including, which of the many reform directions are most likely to lead to new efficiencies and benefits that are espoused. The Institute of Hospital Accreditation Thailand (HAT), the official body promoting hospital quality development and certification, is a means of ensuring not only standardization but also the quality of health care. Thus, many hospitals, pressured by industry and urged by the hospital accreditation commission (HA), have hopped aboard the ISO 9000 or the total quality management (TQM) /continuous quality improvement (CQI) bandwagon.

Currently, of Thai's health care organizations, 50 hospitals both in the government and private sector, which are accredited and certified by HAT (Thailand), are on an accelerated journey of change that is simultaneously transforming past notions of providing services according to a new paradigm. Adjusting to the new requirements that health care organizations radically reinvent how they do their work, hospital accreditation is viewed as one way to gain a competitive edge in the health

care market. In order to be competitive, organizations must design quality into the entire process. They also must focus on continuous quality improvement throughout all phases of the organizational process, not just the end product. Since Hospital Accreditation, as a quality system, affects the entire organization, the organization must adopt a culture that accepts and supports HA. Management must create a pattern of shared vision, mission, values and beliefs that is aimed at continuous quality improvement and customer satisfaction, and that encourages the commitment of organizational members to maintain and sustain quality of services. In order to achieve that end, the individual, the team, and the organization needs to learn how to improve organizational performance. However, an improvement in organizational performance is based on a change in organizational behavior, and that change in behavior is based on some form of learning in the organization. In addition to having attributes of a learning organization, hospitals accredited and certified from HAT, must ensure the same capacity for change, continuous improvement, and innovation as other organizations.

In order to gain a fuller understanding of the learning organization, it is also important to study the actions and behaviors of the leaders in facilitating movement through the learning process, because interacting with individuals and teams is crucial for success. Leadership is considered an important aspect of successful quality management. Thus, the leadership behaviors within an organization are an important factor in an organization's efforts to create a quality culture and a learning organization. Unfortunately, there has been little research that examines the connection between specific leadership behaviors and attributes of a learning organization.

The culture existing in an organization is also essential to study because of its effect on employee behavior and organizational performance. Employee behavior, at all organizational levels, is influenced by many factors, some as personal as personality and motivation, while others are due to the culture of the organization within the organizational setting. Also, the learning organization philosophy in promoting employees' motivation is supported by an organizational culture. The focus of this study is to investigate the organizational culture that exists in the health care organizations that seek hospital accreditation. Therefore, organizational culture and

leadership behaviors, when combined with the organization's ability to apply learning experiences, will enhance organizational performance and sustain continuous quality improvement.

Thus, the study of transformational and transactional leadership and organizational culture in learning organizations at certified accredited hospitals offers meaningful insights into what specific actions on the part of the leaders, and type of organizational culture stimulate the attributes of a learning organization, thus creating a health care organization competency that has a competitive advantage and can sustain the capability of the delivery of quality care.

1.3 Purpose of the Study

The purpose of this study is to examine the relationship of managerial roles within the context of transformational and transactional leadership behaviors, types of organizational culture, and attributes of the learning organization of private and public accredited hospitals. This study is designed to gain insights into conditions that may have the capacity to promote successful changes in hospitals.

1.4 Objectives of the Study

1. To test the relationship between leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators and the learning organization and each of its attributes in both private and public hospitals
2. To determine how much variation and what direct effect leadership behaviors have on learning organizations, including both private and public hospitals.
3. To determine how much variation types of current organizational culture (achievement, support, role, and power–oriented culture) have on learning organizations, including both private and public hospitals.

4. To compare variations in indirect effect of leadership behaviors on learning organizations with regard to types of current organizational culture in both private and public hospitals.

5. To confirm and compare the path analysis of a theoretical model showing subordinates perceived causality between eight roles of leadership behavior, four roles of a current organizational culture, and learning organization in both private and public hospitals.

1.5 Research Questions

The following three research questions are derived from the conceptual framework depicted in Figure 1.

1. What is the relationship between eight roles of leadership behaviors perceived by administrators of private and public hospitals certified & accredited by HAT and the development of a learning organization and each of its attributes?

2. To what extent did the leadership behaviors directly affect the development of the learning organization and indirectly affect the development of the learning organization via a current organizational culture as perceived by subordinates in both private and public hospitals certified and accredited by HAT?

1.6 Significance of the Study

A learning organization is an organization committed to learn powerfully and collectively, and is constantly undergoing processes of transformation to better gather, handle, and use knowledge for enhancing corporate success. This type of organization empowers employees to learn while working, utilizing available resources and technology to optimize both learning and productivity. Although health care organizations usually do not term their quality improvement efforts as a “learning organization“, it is clear that TQM, CQI, or a hospital accreditation plan involves inquiry into a problem and efforts to institutionalize the change resulting from the learning. To become the learning organization, organizational learning plays an important role in organizational transformation. However, the nature of learning and

the way in which learning takes place is determined to a large measure by the culture of the organization and leadership practices. In addition to becoming a learning organization, an effort has to be made to transform the organizational culture in such a way that the system of values, beliefs, ideology, and symbols are supportive of learning capable of developing a successful learning organization culture (Marquardt, 1996: 69-70). Beside organizational culture, effective leadership stimulates a climate where learning takes place within individuals, groups, and throughout the organization. New behavior on the part of individuals and groups leads to innovative solutions. In turn, innovative solutions can provide businesses with competitive advantages in the marketplace.

Thus, this study is important for five reasons. First, it contributes empirical knowledge regarding the perceptions of organizational culture, leadership behaviors and their relationship to learning organizations. Insights from this research study could lead to understanding of the relationship among learning organizations, leadership, and culture in an effort to comprehend how systemic change occurs because of the internal coherence of three variables in health care organizations. The benefit of this research study includes the identification of effective leadership behavior and organizational culture aspects that may enhance and improve levels of organizational learning, through which these three variables finally lead to organizational improvement in times of dynamic change.

Second, this research study has attempted to make a contribution in the area of continuous improvement by assessing how the learning organization is perceived in a hospital after it has officially adopted hospital accreditation. The data gathered could assist hospital personnel in determining staff perceptions of quality improvement programs, identifying the degree to which the quality improvement philosophy has been accepted and investigating areas in which improvements in the program in use may need to be further developed.

Third, this study leads to the re-examination of current leadership and existing organizational culture, and the degree to which a health care organization is a learning organization. The data gathered can provide opportunities to improve organizational learning and quality improvement in areas, as well as to reinforce practices in areas where it is needed such as development and training of leaders.

Fourth, it has important implications for policy, decision-making, and leadership in the organization; and also for strategic planning and human resource management to raise the degree of learning organization.

Fifth, this research study also has implications for the development and training of leaders and the need to manage organizational culture in order to enhance the ability of individuals, teams, and organizations to learn to achieve organizational improvement.

1.7 Limitations

1) The generalizability of the results of this study is limited. The sample selected for this study consisted of 541 hospital employees from nine hospitals in both the government and private sectors. Even though the selected sample for the study is appropriate for the outlined purposes, the generalizability of the findings are limited to the nine hospitals participating in the study, and not to other hospitals accredited and certified by HAT.

2) The leadership behaviors as perceived by chief executives collected from nine hospitals were 30 cases. They could not be computed into the structural equation model due to limitation of their sample size.

3) This research is based on the self-reported perceptual data provided by employees from the participating organization at a specific place in time. The evolutionary nature of learning organizations requires a longitudinal approach.

4) Many hospitals adopted ISO 9002 as a quality program. These are also not considered in the study, because a) inclusion would make the study too unwieldy, and b) those programs are more general quality programs not specifically aimed at the health care system. However a study, using the same theoretical framework, may be of interest for future research.

1.8 Assumptions

An assumption was that all participants would feel comfortable to evaluate the learning organization, the culture of the organization and the leadership behaviors of

their chief executives. Learning organization, culture of the organization, and leadership behaviors were determined by both chief executives and their subordinates. Since the survey relies on self-reported data, it is subject to inaccuracy. For the purposes of this study, it is assumed that these perceptions describe actual data and their responses would be accurate.

1.9 Organization of the Study

The organization of the study is separated into five chapters. The first chapter has provided an introduction, the statement of problem, purpose of the study, objectives of the study, definition and operation of terms and the significance and limitations of the study. In chapter two, a review of literature is provided on the important theories of learning organization, leadership, and organizational culture, including the different learning organization characteristics, leadership behaviors, and organizational culture related to the research study. The research methodology is described in chapter three, along with a description of the interview process. Chapter four presents the results of the data including statistical analysis and major findings. Chapter five is devoted to presenting a summary of the research, conclusions and recommendations for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

The purpose of this chapter is to analyze current literature on the topic of the study in order to present an overview, and to emphasize the importance of the subject to be addressed. The chapter begins with a review of several important learning organization theories and their implications to this study. Next, the concept and definitions of organizational culture are reviewed, and then, the concepts of leadership styles are investigated.

This section is followed by a discussion of the association between learning organizations and leadership behaviors. Organizational culture is explored as well.

2.1 Learning Organization

2.1.1 Meaning of the Learning Organization

Numerous authors have offered definitions of a learning organization. Perhaps the most cited is that of Senge, who defines a learning organization as: "…an organization that is continually expanding its capacity to create its future" (Senge, 1990: 3). In addition, Senge (1990) refers to learning organizations as organizations where people continually expand their capacity to create the results they truly desire, where new expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together. Garvin (1993: 78-91) suggests that a more specific definition of a learning organization is needed if managers are to derive value from the notion. He provides this working definition of a learning organization: "…an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." Pedler, Burgoyne and Boydell (1991: 1) provide a concrete definition of a learning organization as one that facilitates the learning of all its members and

continuously transforms itself and its context. Marquardt (1996: 19) expands on this by referring to a learning organization as an "…organization which learns powerfully and collectively and is continually transforming itself to better collect, manage, and use knowledge for corporate success".

In reviewing these definitions of learning organizations, we can see that there are certain common elements. Campbell and Carins (1994: 11) define those general characteristics of learning organizations as those that tend to focus on:

1) The importance of acquiring, improving and transferring knowledge;
2) Facilitating and making use of individual learning; and
3) Modifying behavior and practices to reflect the learning.

Each definition also has a strong sense of direction (vision), and pays attention to the crucial role and development of each individual within the organization. The organization itself as a "system" is able to change in a proactive way as it constantly uses new information to improve its performance. Thus, the concrete definition of a learning organization described by Garvin (1993: 78-79) best reflects the definition of terms and conceptual approach of this research study. However, what is really meant by this definition has usually been clarified by offering a list of the various elements of a learning organization, which will be described below.

2.1.2 Learning Organization Models and Characteristics

The following are some of the models and characteristics, which scholars and researchers have described from a prescriptive viewpoint, of learning organizations. The core of characteristics proposed in learning organization models is built on various elements that could be called contextual factors of learning organizations. The six dimensions are addressed respectively and the characteristics of learning organizations are summarized into two broad dimensions shown in Table 2.3.

2.1.2.1 Five Disciplines of a Learning Organization.

The first learning organization model is based on the work of Peter Senge (1990). He spoke of innovative learning in his book entitled the Fifth Discipline. Based on his experience and research concerning the mechanisms associated with organizational effectiveness, Senge advocated five disciplines leading

to the creation of a learning organization. The five disciplines proposed by Senge (1990) are: (a) personal mastery, (b) mental model, (c) building shared vision, (d) team learning, and (e) systems thinking. He argues that the five disciplines are the "component technologies" (Senge, 1990: 4) or the vital dimensions that need to be brought together to build a learning organization. A discussion of the five core disciplines may help to facilitate an understanding of organizational learning as proposed by Senge (1990).

The first discipline is personal mastery. It is "…the learning organization's spiritual foundation" (Senge, 1990: 7). It refers to a personal commitment to continuously clarify and deepen personal vision, of focusing energies, of developing patience, and the ability to see reality as objectively as possible. He argues that few organizations focus on encouraging the personal growth of its members, and that this results in vast untapped resources not being developed. It is not clear how personal mastery can be fostered throughout an organization, except through key people modeling behaviors and attitudes that reflect their personal commitment to growth and development.

Thus, organizations can learn only if the individuals in them are learning. "Personal mastery" is the phrase used to describe the discipline of personal growth, the goal of which is to expand one's ability to produce desired results. Personal mastery embodies two concepts: first, those engaged in the discipline continually clarify what is important to them. Second, they constantly attempt to see current reality more clearly. Therefore, a vision is a high level of personal mastery. Lifelong learners are inquisitive and feel connected to others and to life itself. Members in the organization feel part of a larger process in which they can influence transformation.

Mental models, the second discipline, are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action. The discipline of working with mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny. It also includes the ability to carry on meaningful conversation that balances inquiry and

advocacy, where people expose their own thinking effectively and make that thinking open to the influence of others (Senge, 1990: 8-9).

The third discipline is shared vision. Shared vision answers the question, "what do we want to create?" It is the capacity to hold a shared picture of the future we seek to create "The practice of shared vision involves the skills of unearthing shared 'pictures of the future' that foster genuine commitment and enrollment rather than compliance" (Senge, 1990: 9). Shared vision gives coherence to a seemingly diverse set of activities and becomes a common aspiration (Senge, 1990). Senge believes that a key reason for the importance of shared vision is that it gives focus and energy for organizational learning. According to Senge (1990), "You cannot have a learning organization without shared vision, without a pull toward a common goal which people truly want to achieve." Without shared vision, Senge believes, the forces in support of the status quo will be overwhelming and will keep the organization, and its members, mired in its current state.

The fourth discipline is team learning. It is the discipline of learning together. It begins with dialogue. Dialogue is the capacity of members of a team to suspend assumptions and enter into genuine thinking together (Senge, 1990: 10). He described that "Team learning is vital because teams, not individuals, are the fundamental learning unit in modern organizations". Senge (1990) believes that the importance of team learning has never been greater than it is in today's organization. He contends that nearly every important decision that needs to be made in organizations today is now made in teams. Team learning is by nature a collective discipline; no individual can master it. Senge describes it as a "we" experience. The discipline of team learning requires mastering the practice of dialogue in order to successfully think about and deal with complex organizational issues.

The fifth and most crucial discipline is systems thinking. It integrates the other four disciplines into the concept of a learning organization. It is the ability to see the interconnectedness of all thinking. "It is a shift of mind—from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something 'out there' to seeing how our own actions create the problems we experience" (Senge, 1990: 12-13). According to Senge (1990), systems thinking can help organization members see how complex feedback patterns

can generate problematic patterns of behavior within organizations and large-scale human systems. According to the fifth discipline, the five main ideas listed above are not new--what is new is an attempt to integrate all five of the ideas into a single organization. Learning organizations take these five very powerful ideas and pursue them simultaneously. Because the simultaneous pursuit of these is difficult, Peter Senge calls them "disciplines" in the sense that one has to deliberately and studiously attend to them in the course of functioning as a member of an organization. What Senge stresses in his account of what constitutes a learning organization is how systemic orientation integrates the disciplines into a coherent whole that exceeds the sum of its parts. He believes a vision without systems thinking ends up glorifying the future without understanding the forces that must be overcome in order to arrive there. However, adopting systems thinking needs the other disciplines to realize its potential to:

1) Build a shared vision, necessary for fostering a long-term commitment;

2) Expose and challenge mental models that contribute to the openness needed to see reality for what it is and unearth the organization's present shortcomings;

3) Facilitate team learning to develop the skills necessary for people to see beyond themselves and focus on the organizational perspective;

4) Move toward personal mastery, which is important for developing the personal motivation to try continuously to understand how we, as individuals, influence and are influenced by our surrounding environment (Senge, 1990: 12-13).

Senge's five disciplines have implications for this research study because the theory describes a perspective viewpoint on a learning organization, that is, what a learning organization should be. We see five processes or elements as key factors in the creation of the learning organization. The exercise of the five disciplines thus contributes to increased organizational effectiveness in carrying out its primary mission, greater capacity for organizational adaptation to changing internal and external environmental demands, a fuller utilization of the members' abilities and

motivation, and a higher level of job and personal satisfaction by organizational members.

2.1.2.2 Action Imperative of a Learning Organization.

The second model is based on the work of Watkins and Marsick (1996: 4-7) that identified the learning organization as a level of analysis. The level of analysis is divided into four levels: (1) the individual level, which is composed of creating continuous learning opportunities, and promoting dialogue and inquiry, (2) the team level, which includes encouraging collaboration and team learning, (3) the organizational level, which is composed of establishing systems of capturing and sharing learning, and empowering people toward a collective vision, and (4) the global level, which includes connecting the organization to its environment. A model representation of the Watkins and Marsick perspective on organizational learning is presented in Figure 2.1. They described the learning organization as a "template" for the purpose of sustaining learning.

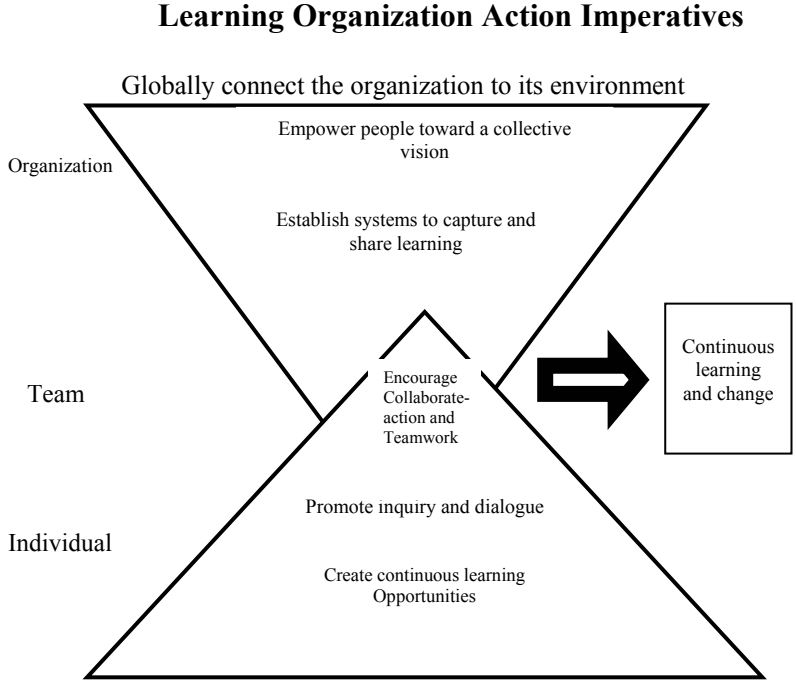

Figure 2.1 Model of Learning Organization

Source: Watkins and Marsick, 1996: 5.

Within organizations, individuals interact, participate, and engage in important tasks, their experiences can lead to the creation of common meanings and constructs that stimulate group and organizational learning. Organizations can transform individual learning to organizational learning by supporting systems and processes that facilitate the creation and distribution of knowledge and information throughout the organization. As a result, these organizational activities lead to organizational understanding and interpretation, which leads to changes in behaviors, actions, and different outcomes (Watkins and Marsick, 1996: 4).

In conclusion, this model illustrates, in Figure 2.1, a team's nature and the learning organization as the union of individuals (the lower part of triangle) and organizations (the upper part of triangle). The key to this model is the overlap portion, which represents team function and leads to continuous learning and sustainable change. The utilization of the combined resources and energies of the individuals, teams, and the organization establishes the learning organization.

Table 2.1 Summaries the Learning Organization Action Imperatives

Action Imperatives	Consisting of
Create continuous learning opportunities	• Effective planning of informal learning, learning how to learn, and just-in-time learning
Promote inquiry and dialogue	• Dialogue in which people mutually explore ideas, questions, and potential action.
Encourage collaboration and team learning	• Medium for moving new knowledge throughout the organization.
Establish systems to capture and share learning	• Building organizational capacity for new thinking embedded and shared with others
Empower people towards a collective vision	• Strategies to implement this action include using groupware to gain organizational consensus and commitment around a shared vision.
Connect the organization to its environment	• Interdependencies between the organization and its internal and external environment are acknowledged and worked through.

Source: Watkins and Marsick, 1996: 3-10.

. 2.1.2.3 The Systems-linked Organizational Model.

The third theoretical perspective proposed by Marquardt (1996: 19) is called “the systems-linked organization model”. According to this framework, a learning organization is defined as: “an organization which learns powerfully and collectively and is continually transforming itself to better collect, manage, and use knowledge for corporate success. It empowers people within and outside the company to learn as they work. Technology is utilized to optimize both learning and productivity. The following are important characteristics and dimensions thought to be part of the system-linked learning organization model:

1) Learning is accomplished by the organizational system as a whole;

2) Members of the organization recognize the importance of learning as an ongoing process;

3) Learning is continuous, linked to organizational strategies and success;

4) Creative and generative learning are stressed;

5) Adopting a systems thinking approach is eminent;

6) Success is dependent on continuous access to information and data resources;

7) An organizational climate that encourages rewards and accelerates individual and group learning exists;

8) Employees network in an innovative and community-like manner inside and outside the organization;

9) Failure is viewed as an opportunity to learn;

10) The force that drives the organization is quality and continuous improvement;

11) Reflective action is encouraged;

12) The organization has well-developed core competencies

13) An agile, and flexible, capacity for continuous adaptation, capacity to renew and revitalize in response to an ever-changing environment (Marquardt, 1996: 19-20).

Figure 2.2 represents the system-linked organization model. The model is composed of five subsystems dynamically interconnected and complementary to each other. The subsystems are: *learning, organization, people, knowledge, and technology.* The heart of the systems learning organizational model is the learning subsystem from which the other four subsystems permeate, but the other subsystems are necessary to enhance the quality of, and impact learning has, in the organization (Marquardt, 1996).

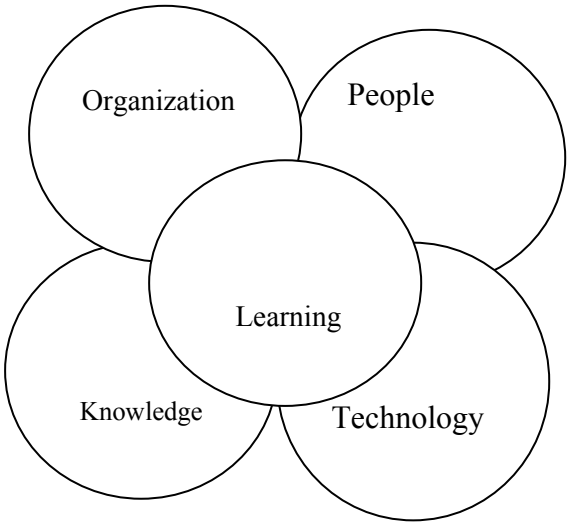

Figure 2.2 The System-Linked Organization Model
Source: Marquardt, 1996: 21.

The following are the core characteristics of the subsystems comprising in the system-linked organization model:

1) Learning subsystem: In this subsystem, learning takes place at the individual, group, and organizational levels as shown in Figure 2.3. This subsystem is based on the skills necessary to maximize organizational learning, represented by the five disciplines proposed by Senge (1990). The learning subsystem also refers to several types of learning crucial to the learning organization: (a) adaptive, anticipatory, and generative learning, (b) single loop, double loop, and deutero learning, and (c) action reflection learning.

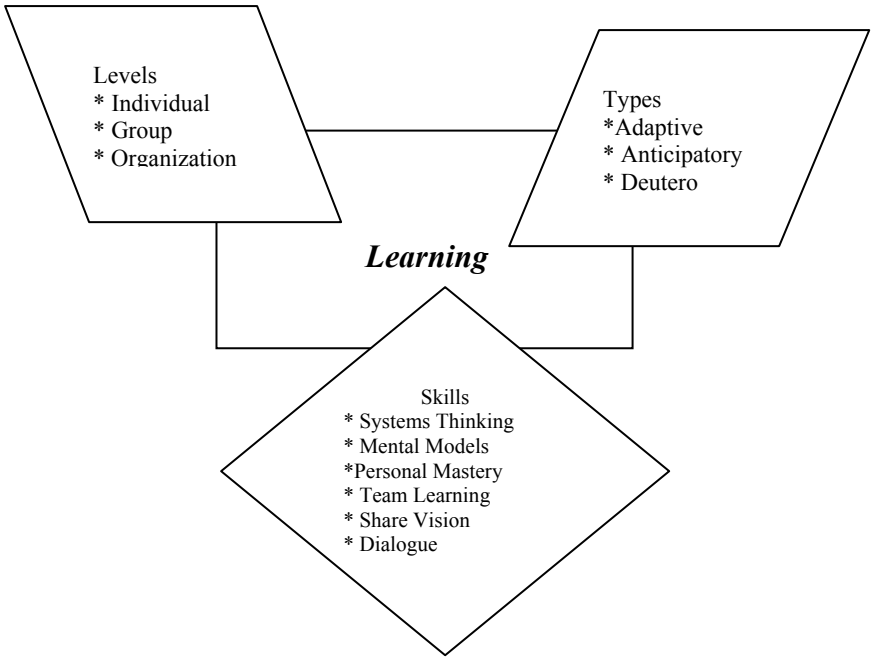

Figure 2.3 Learning Sub –System

Source: Marquardt, 1996: 22.

Strategies for building the learning sub-system suggested by Marquardt (1996: 59-65) are:

(1) Develop action-learning programs throughout the organization.

(2) Increase individual ability to learn how to learn.

(3) Develop the discipline of dialogue in the organization.

(4) Create career development plans for employability.

(5) Establish a self-development crash program.

(6) Build team-learning skills.

(7) Encourage and practice systems thinking.

(8) Use scanning and scenario planning for anticipatory learning.

(9) Encourage / expand diversity, multicultural and global mindsets and leanings.

(10) Change the mental model relative to learning.

2) Organization subsystem: this subsystem considers the organization itself as the place and physical structure in which learning occurs as shown in Figure 2.4. The organization subsystem has four components: (a) culture (values, beliefs, practices, rituals, and customs), (b) vision (hopes, goals and future direction), (c) strategy (action plans, methodologies, tactics, and steps toward the vision), and (d) structure (departments, levels, and configurations).

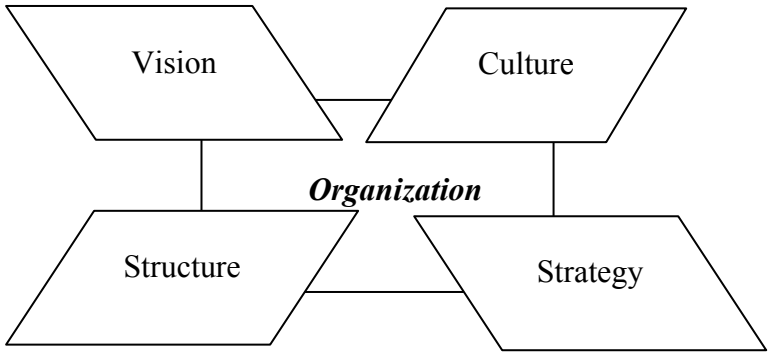

Figure 2.4 Organization Sub-System
Source: Marquardt, 1996: 24.

The strategies of organizational transformation suggested by Marquardt (1996: 94-99) are:

(1) Hold a future search conference to develop a vision of a learning organization.

(2) Gain top-level management support for becoming a learning organization and for championing learning projects.

(3) Create a corporate climate for continuous learning.

(4) Re-engineer policies and structures around learning.

(5) Recognize and reward individual and team learning.

(6) Make learning a part of all policies and procedures.

(7) Establish centers of excellence and demonstration projects.

(8) Use measurement of financial and non-financial

areas as a learning activity.

(9) Create a time, space, and physical environment for learning.

(10) Make learning intentional at all times and in all locations.

3) People subsystem: the people subsystem includes groups of individuals that are of value in enabling learning in the organization as shown in Figure 2.5. This subsystem includes: (a) employees, (b) managers/leaders, (c) customers, (d) suppliers and venders, (e) alliance partners, and (f) community groups.

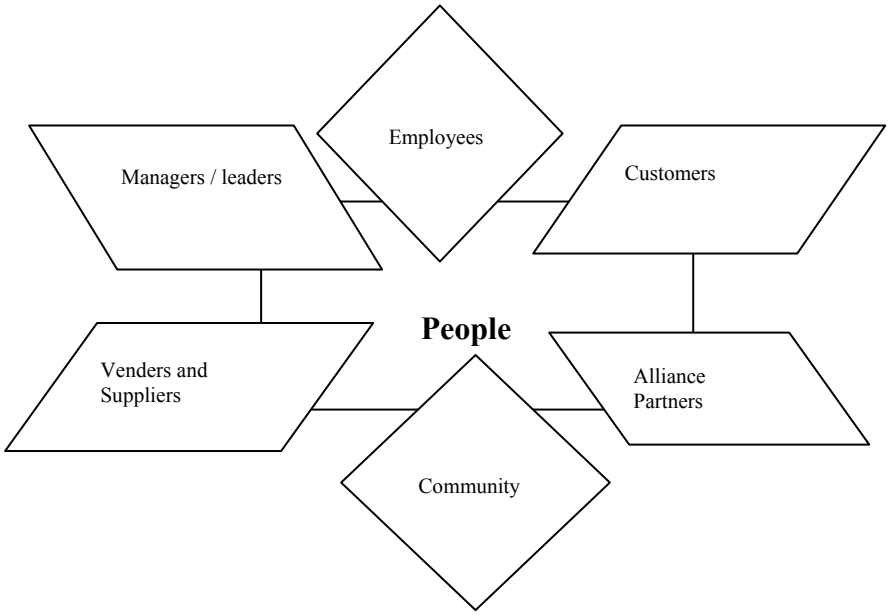

Figure 2.5 People Sub-System
Source: Marquardt, 1996: 25.

The strategies for people empowerment in a learning organization suggested by Marquardt (1996: 122-127) are:

(1) Institute personnel policies that reward learning.

(2) Create self-managed work teams.

(3) Empower employees to learn and produce.

(4) Encourage leaders to model and demonstrate

learning.

(5) Invite leaders to champion learning processes and projects.

(6) Balance the learning and development needs of the individual and organization.

(7) Encourage and enhance customer participation in organizational learning.

(8) Provide education opportunities for community.

(9) Build long-term learning partnerships with vendors and suppliers.

(10) Maximize learning by forming alliances and joint ventures.

4) Knowledge subsystem: this subsystem refers to the direction of the acquired and generated knowledge of the organization; in this respect, collection and dissemination of information in the organization occurs through diverse channels and during different time frames as shown in Figure 2.6. This subsystem includes: (a) acquisition (collection of outside information), (b) creation (new knowledge), (c) storage (coding and preserving information), (d) transfer and utilization (information movement).

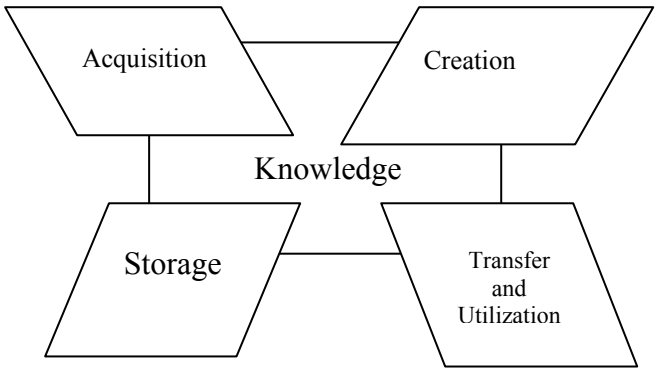

Figure 2.6 Knowledge Sub-System

Source: Marquardt, 1996: 26.

The strategies of knowledge management suggested by Marquardt (1996: 150-154) are:

(1) Create the expectation that everyone is responsible for collecting and transferring knowledge.

(2) Systematically capture relevant knowledge external to the organization.

(3) Organize learning events within the organization to capture and share knowledge.

(4) Develop creative and generative ways of thinking and learning.

(5) Encourage and reward innovations and inventions.

(6) Train staff in storage and retrieval of knowledge.

(7) Encourage team mixing and job rotation to maximize knowledge transfer across boundaries.

(8) Develop a knowledge base around the values and learning needs of the organization.

(9) Create mechanisms for collecting and storing learning.

(10) Transfer classroom learning to the job.

5) Technology subsystem: the technology subsystem is the technological network needed to gain access and to exchange information and learning as shown in Figure 2.7. The subsystems include: (a) information technology (computer based technology), (b) technology-based learning (multiple audio-visual and computer-based), and (c) “electronic performance support system” (EPSS) (capture, storage and distribution of information).

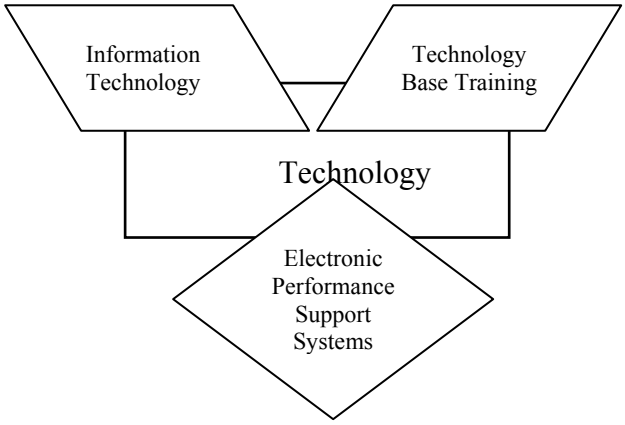

Figure 2.7 Technology Sub-System

Source: Marquardt, 1996: 27.

Strategies for technology application suggested by Marquardt (1996: 174-178) are:

(1) Encourage and enable all staff to connect into the information highway.

(2) Develop multimedia, technology-based learning centers.

(3) Create or expand interactive video instruction.

(4) Use technology to capture knowledge and ideas from people within and outside the organization.

(5) Acquire and develop competencies in groupware and self learning technology.

(6) Install electronic performance support systems.

(7) Plan and develop a just-in-time learning system.

(8) Build internal courseware technology and capacity.

(9) Develop awareness and appreciation of technology as a powerful tool for corporate- wide learning.

(10) Increase technological responsibilities of management and human resources staff.

2.1.2.4 Garratt's Model

The fourth dimension of a learning organization is proposed by Garratt (1987). He focuses on the fundamental structures and thinking processes necessary to achieve the learning organization, noting that learning has become the key developable and tradable commodity of an organization. His model incorporates five elements: (1) the generation of vision; (2) refinement of thinking process; (3) the development of policy and strategy; (4) the notion of managing as a 'holistic' process; (5) the acquisition of new managerial skills from outside the traditional boundaries. Garratt believes that the leadership roles of the directors are crucial to the learning organization because those people at the top of an organization are responsible for giving it direction and purpose. The leadership role is to bring together the information flows, synthesize them, and allow learning and development as adaptation and change take place.

2.1.2.5 Characteristics of a Learning Company

Pedler, Burgoyne and Boydell's (1991: 18-23) model of a learning company, as shown in Figure 2.8, illustrates a different dimension relative to the development of the learning organization. They view responses like TQM, organizational development, and the pursuit of excellence as some of the evolutionary phases of organizations. These actions are responses to problems organizations have faced during a specific era, time, and phase in their organizational development, and for that particular time these responses assisted bringing about solutions. Pedler, et al. explain that the learning organization is the solution for the problems of organizations today. Pedler, Burgoyne and Boydell (1991: 18-23) define the learning company as "an organization which facilitates the learning of all its members and continuously transforms itself and its context" Attempting to integrate concepts of organizational learning with individual learning in organizations, they reject the notion that there is one set formula or right answer. Nevertheless, they propose 11 key attributes, which can be grouped into five clusters—structure, looking in, looking out, strategies, and learning opportunities. These are presented as follows:

1) A learning approach strategy,
2) Participative policy making,
3) Information,

4) Formative accounting and control,
5) Internal exchange,
6) Reward flexibility,
7) Enabling structures,
8) Boundary workers as environmental scanners,
9) Inter-company learning,
10) A learning climate, and
11) Self-development for all

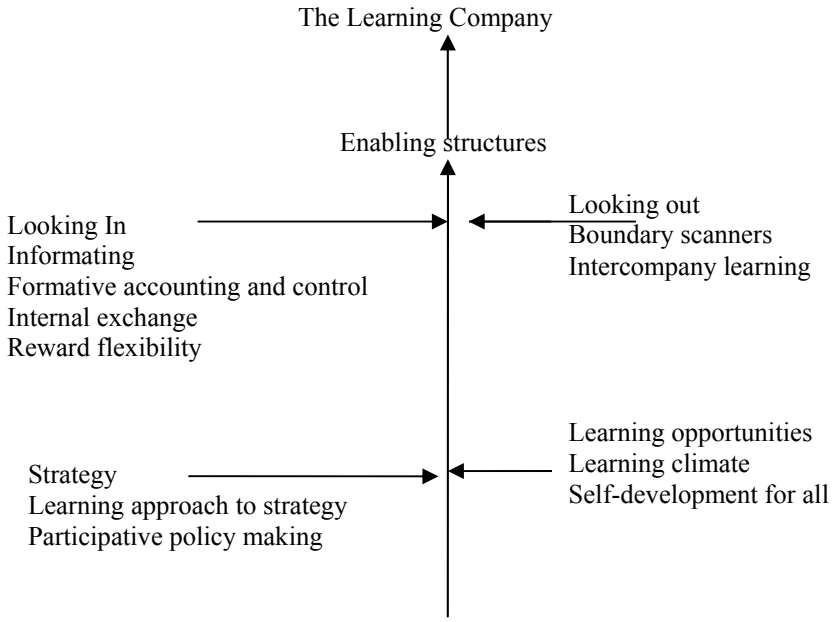

Figure 2.8 The Learning Company Model
Source: Pedler, Burgoyne and Boydell, 1991: 24.

According to Pedler, Burgoyne and Boydell (1991: 18-23), learning approaches to strategy and participative policy-making are closely connected to policy- and strategy-forming processes with regard to the sharing of involvement in these processes. Information systems, formative accounting and control systems, internal exchange of information and reward flexibility are elements within the organization that may either be a help or hindrance to learning. Equally important factors are enabling structures with loosely structured roles and temporary

departmental and other boundaries, which create opportunities for individual and business development. The ability to learn by benchmarking in external relationships by using boundary workers and to promote inter-company learning by engaging in a number of mutually-advantageous learning activities form the fourth group of characteristic of a learning organization. Finally the learning climate and culture that offer learning opportunities for all are emphasized as basic elements and contextual factors for organizational learning. Facilitating members' experimentation and learning from experience and giving appropriate feedback and guidance, the result of which, people are encouraged to take responsibility for their own professional development, are the primary tasks of the leader.

One of the unique contributions of Pedler et al. is their vision of the learning organization beginning with individual development with systematic training, then organizational development where organizations are seen as organisms and capable of learning, and ultimately out of the organization to include all of society as a learning company. To fulfill both “what” and “how” a learning organization should be, the authors also postulate that their characteristics can be viewed as processes, viewed as energy flow, comprising of four learning processes- ideas, action, policy, and operation. The four learning processes thus lead to four fundamental processes consisting of managing, directing, learning, and participating.

Table 2.2 The Learning Company Model

Characteristics	Consist of
1) Learning approach strategy	• Policy and strategy are consciously structured for learning.
2) Participative policy making	• Members and key stakeholders have a chance to contribute and participate in policy making.
3) Information	• Information technology is used to empower to act on own initiative.

Table 2.2 The Learning Company Model (Cont'd.)

Characteristics	Consist of
4) Formative accounting & control	• Budgeting, reporting, & accounting information assists learning on how money works in business.
5) Internal exchange	• Inter-departmental relationships see themselves as they are in the supply chain to end with the user (other dept. as client etc.).
6) Reward flexibility	• Alternative reward systems are designed to tailor to the individual.
7) Enabling structure	• Organizational structure, procedures and processes can easily change to meet job, user or innovation requirements.
8) Boundary workers as environment scanners	• Members who have contacts with outside stakeholders carry out environmental scanning.
9) Inter-company learning	• Learning alliances are developed with other companies for mutual exchange.
10) A learning climate	• Managers' primary task is to facilitate company's members to experience and learn from experience.
11) Self-Development opportunity for all	• Resources and facilities for learning and development are made available.

Source: Pedler, Burgoyne and Boydell, 1991: 24.

2.1.2.6 Garvin's Model

The description of a learning organization stated by Garvin (1993: 80-81) is quite similar to the bulk of learning organization literature, in that the organization is skilled at creating knowledge, then acquiring and transferring that knowledge so that its behavior is modified to reflect new knowledge and insights. The learning organization model developed by Garvin (1993) is composed of five main practices in building a learning organization: (1) systematic problem solving, (2) experimentation with new approaches, (3) learning from experience and past history, (4) learning from experiences and best practices of others, and (5) transferring knowledge quickly and efficiently throughout the organization. Gravin emphasizes that to truly be a learning organization, there must first be a commitment to learning and he suggests a shift in focus away from continuous improvement toward a commitment to learning.

In summary, there are a number of conceptual models that have been developed on the nature of a learning organization. Most models have been built on the assumption that the ability for the organization to learn faster than its competitors may be its only form of sustainable competitive advantage. The summarization of these models is shown in Table 2.3. The model taken from Pedler, Burgoyne and Boydell (1991) seemingly is the most penetrative of the other models and probably has become the most popular and most widely referred-to model in recent literature. This is the area where theory building has clearly reached the point of a synergetic model. The 11 characteristics of a learning organization identified in this model are very similar to Watkins and Marsick (1996) and Marquardt (1996). Even though these characteristics are organized differently, they are similar ideas of five main `disciplines': mental models, shared vision, personal mastery, team learning, and systems thinking. These form the foundation of the `learning organization' according to Senge (1990). Similarities with this model may also be found in Garvin's (1993) five main activities of the learning organization. Becoming a learning organization, the learning capacity of the organization, emphasis on learning at the individual, team and organizational level, are essential considerations because a learning organization is an organization skilled at creating, acquiring and transferring knowledge and at modifying its behavior to reflect new knowledge and insights (Garvin, 1993).

Although learning organizations presented here are emphasized within various characteristics, the similarity of ideas of these learning organizations is that they need members who are willing to continuously develop their skills in creating new insights as well as their abilities to work together as a team (Senge, 1990: 139-143). In order to grasp the idea of being a learning organization, it requires an understanding of the strategic internal drivers needed to build a learning capability. Consequently, we need to look more deeply at the contextual factors of learning, that is, those factors that are expected to improve organizational learning by sharing knowledge, information, or learning processes.

Table 2.3 Summary of Models of Learning Organizations

Source	Means	Ends
Senge (1990)	• Systems thinking • Personal mastery • Mental model • Shared vision • Team learning	An antidote for learning disabilities, especially fragmentation; expands organization's capacity to create their future; gives an organization a sustainable source of competitive advantage-ability to learn faster than its competitors.
Watkins and Marsick (1996)	• Create continuous learning opportunities • Promote inquiry and dialogue • Encourage collaboration and team learning • Establish systems to capture and share learning • Empower people toward a collective vision • Connect the organization to its environment • Provide leaders who model and support learning throughout the organization	Enables an organization to more effectively respond to challenges and changes; individual and organizational learning is enhanced and accelerated; promotes system thinking.

Table 2.3 Summary of Models of Learning Organizations (Cont'd.)

Source	Means	Ends
Marquardt (1996)	• Empower people • Integrate quality initiatives with quality of work life • Create free space for learning • Encourage collaboration and sharing the gains • Promote inquiry • Create continuous learning opportunities	Creates organizations that are able to adjust to the changing environment around them; only organizations that can transform themselves into more intelligent, proficient organizations will survive into the next millennium; achieves strategic advantages.
Garratt (1987)	• Generation of vision • Refinement of thinking process • Develop policy and strategy • Manage as a 'holistic' process • Acquire new managerial skills	Learning is a key developable and tradable commodity of an organization; learning of people and organization are core to long – term survival.
Pedler, Burgoyne and Boydell (1991)	• A learning approach to strategy • Participative policy making • Information • Formative accounting and control • Internal exchange • Reward flexibility • Enabling structures • Boundary workers as environmental scanners • Inter-company learning • A learning climate • Self-development opportunity	Release of underdeveloped potential; transformation of individuals and the organization; key to survival and development; enables organization to adapt, change, develop and transform in responds to wishes of people inside and outside organization; may lead to a Learning Society.

Table 2.3 Summary of Models of Learning Organizations (Cont'd.)

Source	Means	Ends
Garvin (1993)	• Systematic problem solving • Experimentation with new approaches • Learning from experience and past history • Learning from experiences and best practices of others • -Transference of knowledge quickly and efficiently throughout the organization	Shifts focus away from continuous improvement toward commitment to learning; organization becomes adept at translating new knowledge into new ways of behaving.

2.2 Learning Process

This section articulates a description of learning organizations, that is, how an organization learns. Organizational learning is viewed as a "conscious attempt" by organizations to improve their adaptability and efficiency during times of change, which in turn, increases the organizational capacity to respond quicker and more effectively to an increasingly complex and dynamic environment. Organizational learning focuses on the acquisition of collective knowledge, skills, and attitudes that are disseminated, archived, and translated into practice to enhance the performance of the organization. Argyris and Schon (1978: 18-28) identify single-loop learning, double-loop learning, and deutero-learning as the three types of learning that occur in an organization.

2.2.1 Single-Loop Learning

Single-loop learning, also known as lower level learning (Fiol and Lyles, 1985: 807), adaptive learning or coping in organizations, occurs when mistakes are identified and responded to appropriately as organizations work toward achieving

their goals. Thus, single-loop learning can be equated to activities that add to the knowledge–base or specific organizational competencies or routines without disturbing the fundamental nature of the organization's activities.

2.2.2 Double-Loop Learning

Double-loop learning, also known as high-level learning, is generative learning or learning to expand (Fiol and Lyles, 1985: 808). An organization's capabilities (Senge, 1990), serve to help the organization "make sense" of its environment while expanding its capacity to achieve its goals by expanding its view of available options, resources and actions. This type of learning in organizations occurs whenever the errors that affect the maximization of performance are detected, corrected and eliminated from occurring again due to a mismatch between the intention of a work behavior or decision and the actual consequences (Argyris and Schon (1978: 20). This learning is enhanced within the organization as organizational members question and modifies existing norms, procedures, policies, practices, and outcomes.

2.2.3 Deutero-Learning

Deutero-learning is an active organizational process and can only occur in organizations after an awareness of and commitment to organizational learning is made. For this type of learning to occur in an organization, single-loop learning and double-loop learning must be active organizational learning practices, which identify the processes, practices and structures that promote or inhibit organizational learning. This "awareness of ignorance" serves as the primary motivating factor for organizational learning by actively seeking to identify the prevailing performance gaps that affect targeted outcomes and actual performance (Argyris and Schon, 1978: 26-28).

The key defining element among these types of organizational learning is that while double-loop and deutero-loop learning are active learning processes concerned with "why and how to change the organization", single-loop learning passively accepts organizational change without questioning the core values or basic assumptions of the organization.

2.2.4 The Elements of the Learning Process

Organizational learning is defined as "the capacity or processes within an organization to maintain or improve performance based on experience". According to DiBella, Nevis and Gould (1995: 74), the organizational learning process has identifiable stages; they are knowledge acquisition, knowledge sharing, and knowledge utilization. The framework of this organizational learning process, presented in Figure 2.9, shows a mapping of fourteen elements comprised of six learning orientations and eight learning facilitating factors that are integrated within the learning cycle.

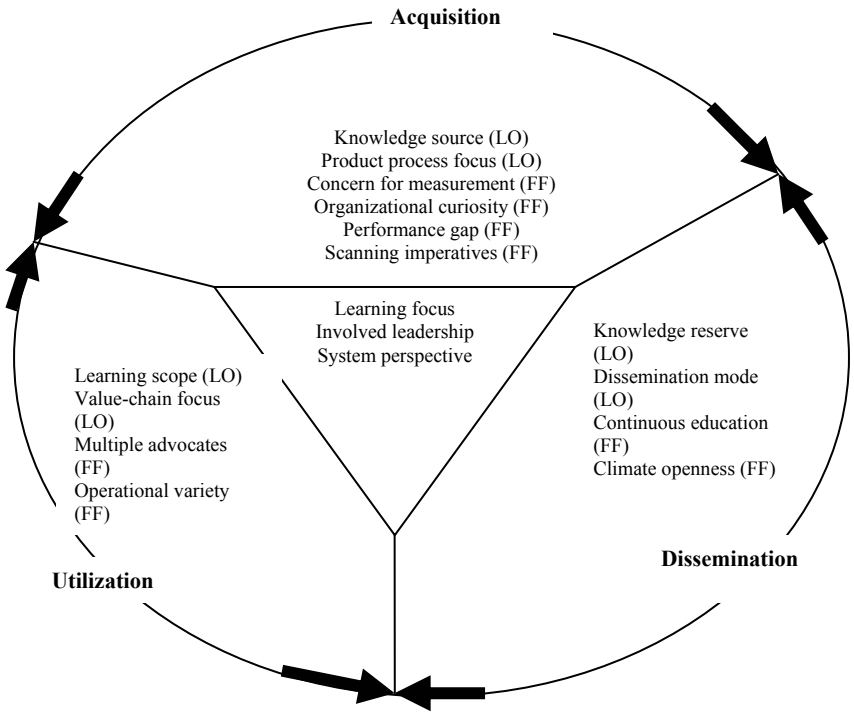

Figure 2.9 Elements of the Learning Process
Source: DiBella, Nevis and Gould, 1995: 82.

Knowledge acquisition is the development or creation of skills, insights and relationships. Knowledge sharing is the dissemination of what has been learned. Knowledge utilization is the integration of learning so it is widely available and can be generalized to new situations. Regarding these elements of the learning process, organizations gain knowledge directly through the experiences of their own

employees or indirectly through the experiences of other organizations. The first phase of the learning cycle may involve either the creation or acquisition of knowledge. For the learning cycle to engage, employees must give meaning to information so that the creation of knowledge provides a basis for action. To comprehend the potential of the organization to learn, it must have the capacity to disseminate and use that knowledge. In the final phase of the learning process, knowledge that is generated and disseminated must be used to alter decisions, behavior, or culture to enable a completed learning cycle. Each phase of the organizational learning cycle can be explained or developed on the basis of an integrated approach (DiBella, Nevis and Gould, 1995: 74-75).

In conclusion, the learning orientations articulated by Argyris (1992) and DiBella, Nevis and Gould (1995: 73-83) are presented as components of this research framework describing how learning occurs and what is learned. Certain elements described in the learning process are most relevant to portions of the learning organization. With regard to this study of how the learning cycle occurs in health care organizations, the research study intends to use these elements as dependent variables and incorporate them into the learning organization framework.

2.2.5 Different Learning Organization Characteristics Related to the Research Study

According to Hitt (1996: 17), a learning organization has been defined as one in which the members continually acquire, share, and use new knowledge to adapt to an ever-changing environment. By incorporating Peter Senge's principles from the Fifth Discipline within the seven S-framework of his theory of search of excellence, McKinsey's research study presents a system of attributes needed to become a learning organization: (1) shared values; (2) leadership style; (3) strategy; (4) structure; (5) staff; (6) skills; (7) systems management; and (8) synergistic team.

Davies and Nutley (2000: 998-1001) identified the key features of learning organizations in health care organizations; these features were adapted from the Fifth Discipline (Senge, 1990). The outline of these features is: (1) open system thinking;

(2) improving individual capabilities; (3) team learning; (4) updating mental model; and (5) a cohesive vision.

Bennett and O'Brien (1994: 41-49) presented a study of 25 successful learning organizations and revealed 12 key factors that influence a company's ability to learn and change. The 12 factors are discussed as follows:

1) Shared vision/strategy. An organization and its members must have a vision of where they want to go so that they can anticipate what they need to learn to get there. They must develop a broad strategy for reaching their goal so that they know if their learning is moving the organization toward their vision. Furthermore, if organizational learning is to become integral to the company, the vision and strategy must support and promote it.

2) Executive practices. Moving outward from that visionary core, the next building block consists of the practices of executives. The leaders must articulate and support the vision of organizational learning. The leaders hold people accountable for continuous learning and improvement, and inspire the rest of the organization to follow them toward the vision.

3) Managerial practices. For any permanent change to occur, managers--those who support and supervise the day-to-day work of individuals and teams--must behave in accordance with the principles of continuous learning. They help people integrate what they have learned. They encourage risk-taking. They also share the resulting insights and innovations with the executives, who can use this information to explore further improvements.

4) Climate. The learning organization adopts a climate of openness and trust; people are unafraid to share their ideas and speak their minds. Barriers between managers and employees are eliminated and, ideally, everybody works together to support the collective well-being.

5) Organization/job structure. An organization's structure can support continuous learning by allowing for fluid job descriptions that respond to the changing demands of the external environment, as well as to the needs of the organization itself. Practices such as rotating assignments and using self-directed, cross-functional work teams promote this flexibility; Bureaucratic policies and rules that inhibit or impede the flow of information must be kept to a minimum.

6) Information flow. Learning-oriented companies use advanced technology to obtain and distribute information. Computer systems promote easy communication among employees and ensure that all workers get company data relevant to their jobs. Information should be easily accessible and widely distributed through the organization.

7) Individual and team practices. Information is important in part because of its impact on individual and team practices in a learning organization. Shared knowledge can be a strong asset. Organizations succeed when individuals and teams share their learning, when they see mistakes as learning opportunities and not as reasons to blame or punish, when they take responsibility for their own learning, and when they discuss problems honestly and work towards solutions. In learning organizations, people should share expertise through informal conversations such as sharing stories with each other--not from reading manuals.

8) Work processes. Work processes enhance learning organizations and should incorporate systematic problem-solving techniques, allow for experimentation and new approaches, encourage learning from sharing with others, and promote a systematic view of the organization.

9) Performance goals and feedback. To build an organization that uses learning as a tool to fulfill customers' needs, performance goals and the performance-appraisal system must incorporate the needs of customers. Employees' goals--the things for which they are rewarded and held accountable—should focus on meeting customers' requirements. Employees should also get regular formal and informal feedback about how well they are meeting customers' goal. Thus, feedback is critical to employees' learning and improvement.

10) Training and education. Structured training and education efforts play a key role in transforming an organization's practices. In a learning organization, formal training programs focus on helping people learn from their own and others' experience and on becoming more creative problem-solvers. Individual development-planning tools should be available to everyone. An innovative approach is the learning-by-doing approach, often called action-reflection learning (or simply action learning), which allows employees to learn new skills while solving real business problems at the same time.

11) Individual and team development. Learning organizations seek ways to encourage their employees to develop individually; but at the same time, they promote the development of entire teams. Both true teamwork and individual empowerment represent radical shifts in thinking for the business world.

12) Rewards and recognition. This final building block supports all of the others. Reward-and-recognition systems must support and encourage individual and organizational learning (Bennett and O'Brien, 1994: 41-49).

Gardiner and Whiting (1997: 41-48) state that the learning organization may be the key to future success for organizations. The research study was conducted in a large defense-oriented engineering company in the United Kingdom, which had undergone considerable change within the organization. In this context, a diagnostic instrument was developed with the aim of measuring the level of change and the degree to which companies have moved towards becoming learning organizations. The measurement tool with standardized correlation figures 0.8684 was divided up into eight attributes to assess learning organizations (Gardiner and Whiting, 1997: 41-48). The attributes of the learning organization were: (1) self-development; (2) learning strategy; (3) learning climate; (4) participation in policy making; (5) use of information; (6) empowerment; (7) leadership and structure; (8) link with external environment. This research finding showed that the company could not claim to have become a learning organization, though it had moved in that direction. Empowerment and employees' self-development were the areas where the company had developed most.

Griego, Geroy and Wright (2000: 5-12) conducted their research study on predictors of a learning organization. The independent variables, training and education, rewards and recognition, information flow, vision and strategy, and individual team development were assessed using the Learning Organization Practices Profile (Bennett and O'Brien, 1994). The instrument has 12 subsystems, of which five were used for this study. The dependent variable was assessed using Marquardt's (1996) Learning Organization Profile. The profile has five subsystems including learning dynamics, organization transformation, people empowerment, knowledge management and technology application. For this study, 48 working professionals from a population of approximately 150 in a human resource development unit were

randomly selected to take both instruments. This study determined that there were two significant predictors of learning organizations when all five predictor variables were entered simultaneously using multiple linear regression. Rewards and recognition ($p = 0.003$) as well as training and education ($p = 0.045$) were predicted significantly and positively from the Learning Organization Profile.

In their study, Barnsley, Lemieux-Charles and McKinney (1998: 18-28) drew upon theory, empirical research, and real-world examples of learning in health care and other organizations to suggest ways in which integrated delivery systems can create a climate for system-wide learning and facilitate the rapid dissemination and use of new managerial and clinical knowledge. The researchers identified the following three conditions that are critical for the generation, dissemination, and use of knowledge in integrated delivery systems: (1) a shared vision of the system's goals; (2) facilitative leadership to ensure that opportunities, resources, incentives, and rewards support learning; and (3) building communication channels within an organic structure that efficiently transfer information across organizational boundaries.

Mike (1998: 367-377) investigated the learning team approach to help achieve a learning organization and achieve total quality.

Malee Dhamasiri (2000: 234-253) studied the learning organization model via a human resource development unit as an extension of higher education. The questionnaire was composed of the twelve sub-systems of Bennett and O'Brien's learning organization (1994) as follows: (1) vision and strategy, (2) executive practices, (3) managerial practices, (4) climate, (5) organizational and job structure, (6) information flow, (7) individual and team practices, (8) work processes, (9) performance goal and feedback, (10) training and education, (11) rewards and recognition, and (12) individual and team development. Results of the study indicated a medium level in the current state of learning organization in Thai organizations with high possibilities in the sub-system of vision and strategy. Moreover, Thai characteristics found to be supportive to learning organizations were (1) adaptability according to time, place and opportunity, (2) awareness that the purpose of education is know-how, and (3) sensitivity to others' feelings.

Nanthapron Chotinucht and Maneewon Chatuthai (1997: Abstract) studied the development of learning organizations through the cross-functional team approach. The research findings show that the concept of a cross-functional team is beneficial and supportive to the learning organization.

Hassounah (2001: 106-109) compared the organizational behavior of the Health Care Department (HCD) of the city of Campinas in Brazil with the learning organization framework. The study concluded that the Integrated Committee for Quality Management (ICQM) positively promoted the domains of enduring change and action. Such behavior strengthens the argument that the application of learning organizational concepts and corresponding disciplines is also viable in an organization that belongs to the public sector, particularly when executive commitment is realized, as was the case of the HCD. Hassounah identified the successful factors of the learning organization, in which executive management has to give special attention to some areas in order to maximize the successful application of organizational learning concepts. These areas, which are applicable to any organization similar to the HCD, include the following:

1) Shared vision and systems thinking. The organizational vision and mission statements have to go well beyond political preferences and interest groups, while emphasizing the social aspect of the governmental department and the importance of meeting population needs. Therefore, the operational strategy has to focus on goals and objectives that target results not only in terms of productivity, but also in terms of quality.

2) Awareness and sensibilities; attitudes and beliefs. Surveys of the population and employees have to be considered as a source of information for determining objectives and priorities, while aiding the development of new levels of awareness and the improvement of mental models that might influence decision making processes and individual behavior.

3) Innovations in infrastructure. With the mind-set shift toward organizational performance, the budgeting process has to be redesigned to produce financial results and improve both material and human resources.

4) Training program. A training program, tailored to working groups'

specific needs as opposed to mass deployment, needs to be implemented as a means of supporting the new management strategy, with focus on customer needs identification, evaluation of business processes, problem solving, basic statistical tools and systems arche-types.

5) Personal mastery. Executive management must promote the establishment of an environment that encourages employee efforts toward organizational objectives by decentralizing activities and authorities, preparing and approving legislation that removes barriers and/or restructuring the organization.

6) Recognition and rewards. An employee recognition and reward system has to be developed to stimulate creativity. It helps close the gap between the current reality and the organizational vision while minimizing undesired emotional tension that is generated due to feelings of powerlessness or unworthiness.

In a study of development of a profile to assess organizational learning in health care organizations investigated by Bokelman (1998: Abstract), the profile was pilot tested and administered to two samples of hospital department managers in the southeastern United States. Forty-five items were indicated in the profile in four categories: (1) vision/strategy, (2) environment/ culture, (3) communication, and (4) structure. The profile demonstrated strong internal consistency for both samples with Cronbach's alpha values of .94 and .93.

Related to communication, the lifeblood of a learning organization is a free and open system for communicating information and knowledge. Such communication systems are designed to:

1) create practical new knowledge ,

2) provide access to pertinent business and strategic information ,

3) facilitate external scanning (tapping sources outside the organization for information),

4) facilitate the dissemination of information to the appropriate areas of the organization, and

5) support and reinforce each other. (Hassounah, 2001: 106-109).

Gephart, et al. (1996: 40-41) examined the operations of several large successful organizations and indicated the best practice in a learning organization is

that all employees have access to relevant business and strategic information, and the organization provides them with the skills and resources for accessing and using that information. Simply put, information systems that provide fast feedback on an organization's performance as a whole and on its various parts, enable learning. WalMart is a leader in that kind of information flow. It owns a satellite communications system connected to every supplier and to every point of sale in its stores. Store employees have immediate access to financial data for decision-making, and suppliers have point-of-sale data for cost-effective ordering and inventory control.

At Federal Express, communication, information, and knowledge-management systems support and reinforce each other. Performance-management technology monitors the complete history of every package, as well as billing and unanswered phone calls. Any employee can provide up-to-date information to customers. They have elaborated that the structure of a learning organization should be able to:

1) overcome internal divisions and rigidities,
2) facilitate work and learning across external boundaries, and
3) capture and share learning.

Overcoming the barriers of different functions and divisions is a major challenge in many companies trying to become learning organizations. In a learning organization, roles are flexible, and work is done in cross-functional teams that bring together perspectives from across the organization. Cross-training, cross-divisional job assignments and job rotations all make for a flexible workforce. Thus, decentralized organizational structures can enable productive organizational learning. Clearly, work and learning take place across external and internal boundaries within this organizational structure (Gephart, et al., 1996: 40-41).

Goh (1998: 5-12) stated that building a learning organization is key to business success. From this literature review, it is argued that learning organizations have the following core strategic building blocks

1) Mission and Vision -- Clarity and employee support of the mission, strategy, and espoused values of the organization.

2) Leadership -- Leadership that is perceived as empowering

employees, encouraging an experimenting culture, and showing strong commitment to the organization.

3) Experimentation -- A strong culture of experimentation that is rewarded and supported at all levels in the organization.

4) Transfer of Knowledge -- The ability of an organization to transfer knowledge across organizational boundaries and to learn from failures.

5) Teamwork and Cooperation -- An emphasis on teamwork and group problem-solving as the mode of operation and for developing innovative ideas.

6) Supporting foundation-- The five strategic building blocks require two major supporting foundations. First, there has to be an effective organization design that is organic, flat, and decentralized, with a minimum of formalized procedures in the work environment. Second, appropriate employee skills and competencies are needed for the tasks and roles described in the strategic building blocks.

The aforementioned literature reviews reveal many common characteristics of learning organizations based on the concept of "the fifth discipline". These are as follows:

1) Learning must take place at every level: individual, team and organization.

2) Organizational structure, environment, strategies, climate, and reward and recognition are considered as supportive, and accelerate learning.

3) Communication channels and information flow should be across the boundaries of the organization.

4) Empowerment, active participative decision-making and commitment to the change process are main aspects of a learning organizational culture.

5) Training and education, individual and team development, and self-development opportunities for all are essential for learning strategies based on the cross-functional team learning approach.

6) Shared vision is fundamental for a learning organization to know where they are and where they are going.

7) Leadership, executive practice, and managerial practice influence learning in an organization.

8) Ability to transfer knowledge across organizational boundaries is an important part because skill and knowledge acquisition are obviously useless unless they can be transferred to the immediate job.

Presently, few research studies give any evidence that the learning organization is being measured in health care organizations. The reviewed research studies do provide a means of assessing key aspects of learning organizations within various contexts. These should be assessed in all aspects of an organization. Thus, the key elements of learning organizations identified from research studies and the learning organization model proposed by Bennett and O'Brien (1994) are taken and adjusted as a theoretical framework for this research study.

2.3 Leadership Behaviors

This section discusses the dimensions of effective leadership and four types of leadership theories respectively: (1) Trait approach, (2) Behavioral and attitudinal leaderships, (3) Situational leadership, and (4) Transformational leadership.

2.3.1 Leadership Theories

In the learning organization, leaders and managers have considerable power to create an effective learning environment. They can enable employees' development of knowledge, skills, and abilities through personal development. They also provide the systems that encourage learning. The implementation of quality improvement requires extraordinary leadership, energy, patience, and skill. Thus, effective leadership is essential. The issue of leadership will be addressed in this section in the context of transforming health care organizations. This section focuses on the characteristics of leadership required to challenge the business-as-usual environment and lead to quality improvement.

2.3.1.1 Traits Approach to Leadership

Initial investigations of leadership considered leaders as individuals endowed with certain personality traits, which constituted their abilities to lead. The

studies investigated three broad types of individual traits. First, there are physical factors such as height, weight, physique, appearance and age. Second, researchers have examined ability characteristics such as intelligence, fluency of speech, scholarship and knowledge. Third, a wide range of personality features have been examined such as personal adjustment, self-confidence, interpersonal sensitivity and emotional control (Stogdill, 1948 Quoted in Bryman, 1992: 2). Stogdill (1974 Quoted in Bryman, 1992: 3) identified six categories of personal factors associated with leadership: capacity, achievement, responsibility, participation, status, and situation. Thus, the attempts to isolate specific individual traits led to the conclusion that no single characteristic can distinguish leaders from non-leaders.

2.3.1.2 Behavioral and Attitudinal Approaches of Leadership

Other attempts to examine leadership have yielded information about the types of behaviors leaders exhibited in order to determine what makes effective leaders. These behaviors conducted by researchers at Ohio State University have been categorized along two common dimensions: initiating structures (concern for organizational tasks) and consideration (concern for individuals and interpersonal relations). Initiating structures include activities such as planning, organizing, and defining the tasks and work of people: how work gets done in an organization. Consideration addresses the social, emotional needs of individuals -- their recognition, work satisfaction and self-esteem influencing their performance (Daft, 1999: 69-72). In addition, the assessment of leaders' skills along these two dimensions--initiating structures or consideration—provides a comprehensive overview of leader effectiveness.

In the 1950's, researchers at the University of Michigan took a different approach by directly comparing the behavior of effective and ineffective supervisors. The Michigan researchers developed a leadership model based on two dimensions: employee-centered leader and job-centered leader (Daft, 1999: 73). A leader at the high end of the job-centered leader is task-oriented. This type of leader insists on meeting deadlines, decides in detail what will be done and how it should be done, and establishes clear channels of communication and clear patterns of work organization. In contrast, leaders low in this dimension are hesitant about taking

initiatives in the group, make suggestions only when members ask for it, and let members do the work the way they think is best .

Leaders at the high end of the employee-centered leader are people-oriented. They express appreciation for good work, stress the importance of job satisfaction, maintain and strengthen the self-esteem of subordinates by treating them as equals, make special efforts to help subordinates feel at ease, put subordinates' suggestions into operation, and obtain subordinates' approval on important matters before going ahead. In contrast, leaders low on the employee-centered do not care how they get along with subordinates (Daft, 1999: 73-75).

In 1964, Blake and Mouton defined leadership styles in terms of two dimensions: concern for people and concern for production as the two axes and five leadership styles that result from the emphasis on production or people: Country Club Management, Team Management, Middle of the Road Management, Impoverished Management, and Authoritarian Management. Therefore, behavioral leadership attempts to establish the orientation of leaders to task or people as the key determinants of leadership styles (Daft, 1999: 75).

2.3.1.3 Contingency Approach to Leadership

Contingency models of leadership propose that the emergence of any one style of leadership is contingent upon the environment in which the leaders operate. Fiedler's concept of a leader's effectiveness in attaining high performance is contingent upon the following variables: the leader's task or relationship orientation, and the degree to which the leader has power of influence in the situation. The concept was developed around the Least Preferred Co-Worker (LPC) ratings scale as a measure of leader personality (Daft, 1999: 94-95).

House and Mitchell (1974 Quoted in Daft, 1999: 102-104) in the Path-Goal theory differentiate four leadership styles that leader power is based on. These are authority, political influence, expert influence, or charismatic influence. Path-Goal Theory included the interaction of leadership behaviors with situational characteristics in determining the leaders' effectiveness. House's (1971 Quoted in Bryman, 1992: 12-13) identified four leadership behaviors: directive, achievement-oriented, supportive, and participative, and two situational variables (subordinates'

personal characteristics and environmental demands such as the organization's rules and procedures) that most strongly contributed to leaders' effectiveness.

Hershey and Blanchard's Situational Leadership Model (Daft, 1999: 99) analyzes the organizational environment prior to applying one of the four leadership styles: telling, selling, participating and delegating.

2.3.1.4 Transformational Leadership

At the core of this study lies the assumption that transformational leadership influences learning among individuals and groups. The purpose of this section is to identify and explain transformational leadership and expand on how it is assumed to impact organizational culture and the learning organization. The best-known transformational theory is Bernard Bass' transformational leadership constructed upon the framework of James MacGregor Burns (1978 Quoted in Bryman, 1992: 95), in which he articulated and divided the role of leadership into transformation and transaction components.

Transformational leaders have a clear collective vision and, most importantly, they manage to communicate it effectively to all employees. By acting as role models, they inspire employees to put the good of the whole organization above self- interest. They also stimulate employees to be more innovative, and they themselves take personal risks and are not afraid to use unconventional (but always ethical) methods in order to achieve the collective vision (Bass, 1985: 16-21). Hater and Bass (1988: 695-702) stated that the transformational leader uses symbolic imagery expressed through the firm's mission and an emphasis upon extra effort, in conjunction with structure and consideration to influence follower behavior.

The transactional leader utilizes structure and consideration to motivate the follower's expectations for reward associated with goal attainment. Transformational leadership is a process during which the leader recognizes what followers need and desire and clarifies how these needs and desires will be met, based upon the effort expended by the follower to accomplish the goals (Bass and Avolio, 1994: 3). Transactional leadership stems from a traditional view of the leader having an exchange between leader and follower, such as the follower receiving wages or prestige for compliance with leader's wishes (Burns, 1978 Quoted in Bryman, 1992: 95). Howell and Avolio (1993: 43-53) said the transactional process is focused upon

the first order needs and exchanges, in which the leader provides the motivation for the follower to perform by providing a sense of direction and confidence.

Thus, transactional leadership relies mainly on centralized control. Leaders control most activities, telling each person what, when and how to do each task. Transformational leaders, on the other hand, trust their subordinates and leave them space to breathe and grow. Transformation thus is a more developmental and constructive form of leadership for both individual employees and the organization as a whole. This form of leadership goes beyond traditional forms of transactional leadership that emphasized corrective action, mutual exchanges and rewards only when performance expectations are achieved. It is apparent that most outstanding leaders have keen insight into human behavior and motivation and possess the ability to communicate with precision.

In a research study entitled "The Leadership Factor: Leading the Way toward the Next Millennium (Kezsbom, 1998: 1-3) suggested the field of management is undergoing a fundamental shift from transaction to transformation. This shift is reflected by corporate transformations away from the traditional hierarchical management structure toward full participation by every employee in focusing on customer needs and providing products and services that reliably meet those needs. This management shift has been prompted by two recent trends: the increasing rate of change brought on by global competition and the fundamental change in organizational technology and its corresponding ideology. Each of the transformational leadership models will be described in the following sections.

2.4 Model of Transformational and Transactional Leadership Theory

2.4.1 Bass & Avolio's Transformational and Transactional Leadership

This research study relies on the assumption that transformational leadership influences the ability of the organization to learn. The study defines and explains transformation leadership and expands on how it is assumed to impact the learning organization, organizational culture, and organizational performance. Bernard Bass (1985) expanded on Burns' original concepts of transformation leadership in his book, "Leadership and Performance: Beyond Expectations". Bass' (1985: 28-29) definition

of decision styles of transformational leadership was based on the leader's effect on followers. The transformational leader may identify the transcendental goals toward which he may direct followers to work, provide persuasive symbols and images about what a renewed organization would look like, consult followers on their awareness of the importance of the organization's ultimate objectives, search for a participative consensus for restructuring the organization, and delegate to encourage subordinates development.

Bass (1985: 20) viewed transformational leadership as a phenomenon which motivated organizational members to do more than what seemed possible, given a set of circumstances. The transformational leader seeks new and innovative ways to accomplish tasks or take advantage of opportunities. According to Bass and Avolio (1994: 2-3), transformational leadership is more proactive than reactive, more creative and innovative and exhibits general intelligence and cognitive creativity. Transformational leaders also generate awareness of the mission or vision of the team and organization. Furthermore, transformational leaders motivate others to do more than they originally intended and often even more than they thought possible. They set more challenging expectations and typically achieve higher performance.

The model of transactional and transformational leadership proposed by Bass (1985) indicates that transformational leadership does not take the place of transactional leadership but uses it in attaining the leaders', followers', and organizational goals. The model of transactional and transformational leadership has identified six leadership dimensions, which correspond with higher levels of performance and satisfaction produced among followers. Four dimensions, 1) idealized influence, 2) inspirational motivation, 3) individual consideration, and 4) intellectual stimulation, are associated with transformational leadership. Two dimensions, 5) contingent reward, 6) management by exception are associated with transactional leadership. Transformational factors were found to be highly correlated with extra efforts exerted by followers, a perceived level of team effectiveness, and a high level of work satisfaction on the part of followers (Bass and Avolio, 1994: 4-5).

2.4.1.1 Transformational Dimensions

1) Idealized influence. Idealized influence, according to Bass and Avolio (1994: 3) has the most impact on perceived team effectiveness and

satisfaction. Charismatic leadership, a sub dimension of factors associated with idealized influence involves instilling pride, faith, respect, and the creation of a sense of vision and mission. The charismatic leader generates excitement and heightened expectations through images and through the meaning the images create.

2) Inspirational motivation. Inspirational motivation is considered to be an emotional quality in the influencing process between leader and follower. Leader behaviors include stimulating an optimistic and attainable view of the future, modeling values in everyday practice and providing symbols that justify actions. The result of inspirational motivation is an increase in the followers' commitment to the collective mission of the organization or group (Bass and Avolio, 1994: 3).

3) Individual consideration. The third transformational factor is individualized consideration (Bass and Avolio, 1994: 4-5). The leader who demonstrates individualized consideration gives responsibility to individuals at all levels of the organization and utilizes the individual's talents in such a way as to create and stimulate a sense of personal achievement and satisfaction. Assignments are delegated to provide individuals of the organization with opportunities for learning and acting. Neglected members are given personal attention and all individuals are treated as respected colleagues (Bass and Avolio, 1994).

4) Intellectual stimulation. This is the fourth dimension transformational leaders provide to followers (Bass, 1985: 63). Transformational leaders are more concerned with ideas and creative solutions than with established processes. They articulate and project ideas into robust images for others to grasp and take hold of on their own to explore and implement. Transformational leaders discern, comprehend, visualize, conceptualize, and articulate the opportunities and the threats, the strengths and the weaknesses, and the comparative advantages of the situations confronting his or her constituents or organization. These actions impel the development of innovative strategies and solutions and fuel the transformation of the organization.

2.4.1.2 Transactional Dimensions

1) Contingent reward. Bass (1985: 121-123) spoke of the transactional leaders as demonstrating contingent reward. Transactional leaders who

practice contingent reward tell their followers what to do and when to do it, if they expect to receive a reward for their efforts.

2) Management-by-exception**.** Management-by-exception is an intervention by the leader when there is a deviation from the standards set forth by the leader and follower (Bass, 1985: 135-137). The objective of management –by-exception is to maintain a controlled, rational, and equitable system that is the archetype of transactional leadership.

2.4.1.3 Laissez Faire Dimension

Laissez faire behavior is not really leadership at all. In fact, it is referred to as non-leadership. The major indicator of laissez faire behavior is the manager's or leader's incapacity to get involved. The leader works intentionally on avoiding involvement or confrontation, keeping personal interactions to a minimum. This approach indicates a leader fast losing his or her power base, out of touch with his/her workers, and a daily reminder to the organization of anachronistic work practices. Individuals who take a laissez faire approach are on the express elevator to early retirement (Bass, 1990: 544-546).

Through extensive study of a comprehensive leadership model, Bass and Avolio (1994) have determined there are a variety of effective leadership practices, including transactional and transformational leadership. They also have provided a clear picture, supported by many research studies, to demonstrate the importance and validity of transformational leadership and its impact on individual, group, and organizational performance (Bass and Avolio, 1994).

2.4.2 Kouzes and Posner' s Five Practices of Exemplary Leadership

Another important point on leadership is that during times of crisis, such as the crisis in healthcare today, transformational leadership is required. The transformational leadership model proposed by Kouzes and Posner (1997) integrates the characteristics of transformational, moral, charismatic, and visionary leadership. Kouzes and Posner (1997) conducted research on thousands of leaders across a wide variety of disciplines and industries, including business and government executives. They began their research studies in the early 1980's by surveying organizational members and asking them the following question: "What characteristics do you look

for and admire in your superiors?" (Kouzes and Posner, 1997: 20). They administered the questionnaire to over 15,000 people in four continents, conducting the research by questionnaire once in 1987 and then again in 1995. These leadership behaviors are presented with five common practices as follows:

1) Challenging the process refers to a leader's ability to question the status quo and to innovate and initiate change. Leaders lead by seeking out change and new ways of doing things. They listen to, recognize, and implement good ideas from others. This leadership aspect also involves risk taking and learning from mistakes (Kouzes and Posner, 1997: 9-10).

2) Inspiring a shared vision involves a sense of purpose, direction and meaning into one's daily activities. According to Kouzes and Posner (1997: 10-11), inspiring a shared vision requires leaders to make full use of their intuitive knowledge to formulate an inspiring vision of the future assuring that the vision incorporates the aspirations of the constituents. When the vision is shared in an organization, leaders must articulate the vision in a way that paints an exciting picture by using "powerful language".

3) Enabling others to act means creating opportunities for others. Leaders encourage collaboration, build teams, and empower others to act. They push decision-making down in the organization to the employees who interface with customers. By sharing power, they create an empowered workforce (Kouzes and Posner, 1997: 11-12).

4) Modeling the way means being a role model for all constituents so that the values of the organizations are consistently demonstrated by leadership. "Leaders take every opportunity to show others by their own example that they are deeply committed to the aspirations they espouse. Leading by example is how leaders make visions and values tangible" (Kouzes and Posner, 1997: 12-13).

5) Encouraging the heart refers to recognition and celebration (Kouzes and Posner, 1997: 13-14). This factor demonstrates appreciation and builds morale. Celebration is a symbolic way to strengthen the bond among people, thereby maintaining their commitment to the shared vision.

In addition, Kouzes and Posner's transformational leadership presents characteristics of leaders with competency and vision.

2.4.3 Competing Values Framework for Transformational Leadership

This section illustrates a very different view of leader competence; more complicated, more ambiguous and more adaptable. Quinn, et al. (2003) calls it "competing values" in recognition of the varied roles a leader must play. Roles of leaders are or seem to be paradoxical opposites in value and orientation. Quinn presented these eight roles in terms of the competing values model of organizational effectiveness developed by Quinn, et al. (2003). In the Quinn model of leadership, roles are summarized in terms of eight leadership roles; their associated competencies are seen as important for effective managerial leadership. The eight roles are presented in a circular pattern based on the two underlying dimensions of stability versus flexibility and internal versus external focus identified by the effectiveness model. This model is presented in Figure 2.10.

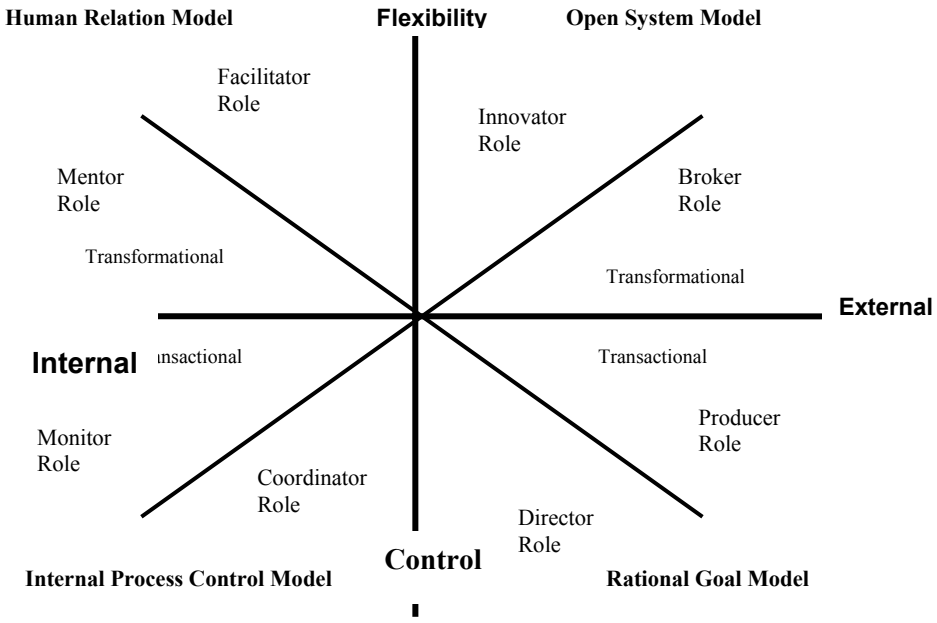

Figure 2.10 Competing Values Framework
Source: Adapted from Belasen, et al., 1996: 89.

Although Quinn, et al. (2003) does not develop the concept of behavioral complexity, his leadership model does stress the same basic theme: the need for leaders to reframe underlying polar opposites such as stability and flexibility in order to see a more complex concept of leadership that encompasses both ends of the

continuum. The model assumes that a traditional view of the two ends of the continuum as incompatible and contradictory is characteristic of a lower level of development as a leader, and assumes that the ability of leaders to reconcile these extremes is characteristic of a higher level of development. In keeping with the emphasis of this model on behavioral complexity and leadership as a portfolio of capabilities, the eight roles in the model are defined in terms of a set of skills necessary to perform each role (Denison, Hooijberg and Quinn, 1995)

Denison, Hooijberg and Quinn (1995) and Quinn, et al. (2003) described that the leadership models are classified into two of the leadership roles within each of four quadrants. The upper-right quadrant, which the effectiveness framework links to open-systems theory and the process of adaptation to the organizational external environment, defines two leadership roles.

1) Innovator Role: A definition of innovator is a creative dreamer. The leader as innovator is expected to come up with inventive ideas, experiment with new concepts, do creative problem-solving, and continually search for innovations and improvements. The effective innovator is a creative thinker with a strong personal strategic vision. This role requires leaders to provide unique perspectives, which constantly challenge the status quo and a willingness to be ready to initiate and implement organizational change. The innovator must constantly seek out good ideas, look for more effective and efficient processes within an organization, readily take risks and encourage risk-taking behavior in subordinates, develop networks of innovators within an organization, and encourage differing perspectives. Therefore, the innovator is creative and envisions, encourages, and facilitates change.

2) Broker Role: The broker role has entered the lexicon of organizations because it implies a system of linkages and crossings; the term has come to be applied to a system or group of interconnected and cooperating individuals. The leader as broker meets with people from outside the unit to represent, negotiate, market, act as liaison and spokesperson, and acquire resources for the team. The effective broker is keenly aware of both formal and informal political systems of the organization. The effective broker's strong negotiation skills, interpersonal communication skills, and ability to "see the whole picture" serve as sources of power for the organization. The broker's responsibilities are to exert upward influence in an

organization by getting access to higher-ups and persuasively sell ideas. The broker must have political know-how, and be persuasive, influential and powerful. Image, appearance and reputation are important. To improve broker's skills, one must constantly work to develop communication skills, learn alternative presentation strategies (multimedia, video, e-mail, etc.), develop rapport, and build networks by talking to people in other industries, trade associations, government, and the academic community. The effective broker must develop skills for building and maintaining a power base, negotiating agreement and commitment, and presenting ideas effectively through speaking and writing. In conclusion, the broker is politically astute, acquires resources and maintains the unit's external legitimacy through the development, scanning, and maintenance of a network of external contracts.

Moving clockwise to the lower right quadrant, labeled the rational goal model in the effectiveness framework, two more leadership roles are specified. These roles emphasize the rational pursuit of goals external to the group, and the leader's role in defining and motivating the attainment of those goals.

3) Producer Role: The definition of the producer role is someone who is in charge of production -- who sees that the product or service the organization provides actually gets produced. The producer encourages subordinates to complete tasks and reach objectives by creating a climate of productive accomplishment. The effective producer must be task-oriented and work-focused while maintaining high interest, motivation, energy and personal drive. The producer encourages subordinates to accept responsibility and maintain high productivity and stimulates team members to better accomplish stated goals. The skilled producer keeps a positive mental attitude and constantly seeks to empower subordinates to act. Thus, the producer assumes the task-oriented, work-focused role. The producer seeks closure, and motivates those behaviors that will result in the completion of the group's task.

4) Director Role: The effective director role is that of a proficient delegator and shrewd strategic planner. Leader's responsibilities are to clarify expectations and priorities, select alternative courses of actions, and communicate the unit's vision in a meaningful way. He or she must be a decisive initiator who defines problems, set goals, generates rules and policies, delegates effectively, evaluates

performance, and gives instructions. Thus, the director engages in goal setting and role clarification, sets objectives, and establishes clear expectations.

The lower left quadrant is referred to in the effectiveness framework as the internal process model and places primary emphasis on internal control and stability. Two additional leadership roles are specified in that quadrant.

5) Coordinator Role: In an organization, the coordinator works with others and brings a sense of order to the unit by helping people to plan, schedule and organize. He or she is in charge of the team and the team's overall strategy. An effective coordinator anticipates workflow problems and coordinates assignments so that the organizational structure is maintained. The manager's task is to make sure work activities are carried out according to their relative importance with a minimum amount of conflict among individuals, work teams, or work units. Managers also protect continuity, minimize disruptions, complete paperwork, review and evaluate reports, prepare budgets, and coordinate plans and proposals. In addition, the coordinator maintains structure, does the scheduling, coordinating, and problem solving, and sees that rules and standards are met.

6) Monitor Role: The effective monitor is responsible for information management, sorting out the trivial from the important. The monitor maintains a system that sorts and channels necessary information, while filtering out the unnecessary, and organizes that information into a form that leads to effective decision-making.

A person in the monitor role must know what is going on, keep track of progress on assigned tasks and objectives, develop measures and checkpoints, and hold regular reviews. The monitor ensures that team members are complying with rules and meeting their obligations. A good monitor must have a passion for details and be good at rational analysis and problem-solving. The effective monitor must develop logical skills for managing information overload, critical thinking skills for analyzing information, and communication skills for presenting information effectively. The monitor collects and distributes information, checks on performance, and provides a sense of continuity and stability.

The upper left quadrant is referred to in the framework as the human relations quadrant, placing primary emphasis on human interaction and process. Two final leadership roles are defined within that quadrant.

7) Facilitator Role: To facilitate means to make easy or easier. The leader as facilitator makes the process of teamwork easier by fostering collective effort, encouraging group problem-solving, managing interpersonal conflict, and building a framework for learning, based on participative decision-making and the group's stated goals. The effective facilitator needs a strong sense of the group's mission, to help group members identify goals and related issues and enable them, through a variety of activities, to move toward the goals.

The facilitator's responsibilities are to identify issues, find common ground, clarify, and, if possible, resolve conflicts that develop around goals, values, methods, and personalities. The facilitator must be able to keep group members constantly aware of the goals of the process, while avoiding the dangers of allowing the process to become bogged down by tangential issues. The facilitator encourages the expression of opinions, seeks consensus, and negotiates compromise.

8) Mentor Role: The leader as mentor recognizes people as resources who need to be developed through a caring, empathetic approach. A mentor works with individuals to teach and advise them in ways that let them grow in their careers. An effective mentor is expected to treat individuals in a caring way, to be empathetic, to listen carefully, to show concern for the needs of individuals, and to help people. The mentor's primary task is to establish and maintain effective relationships. He or she supports legitimate requests, conveys appreciation, and gives compliments and credit. The competencies of a mentor are self-understanding and understanding others, interpersonal communication, and development of subordinates. The mentor is aware of individual needs, listens actively, is fair, supports legitimate requests, and attempts to facilitate the development of individuals.

Here is a brief summary of the roles of leadership and the competencies associated with each according to the "competing values" concept (Denison, Hooijberg and Quinn, 1995: 527; Quinn, et al., 2003: 16). Each must be used appropriately. Each, when overused, becomes dysfunctional. Balance, self-awareness and appropriate flexibility are essential.

- **The Innovator Role**: Living with change; thinking creatively; creating change.
- **The Broker Role**: Building and maintaining a power base; negotiating agreement and commitment; presenting ideas.
- **The Producer Role**: Working productively; fostering a productive work environment; managing time and stress.
- **The Director Role**: Vision; planning and goal setting; designing organization, and delegating effectively.
- **The Coordinator Role**: Managing projects; designing work; managing across functions.
- **The Monitor Role**: Monitoring personal performance; managing collective performance; managing organizational performance.
- **The Facilitator Role**: Building teams; using participative decision-making; managing conflict.
- **The Mentor Role**: Understanding self and others; communicating effectively; developing subordinates.

According to the aforementioned competing values framework, Quinn, et al. (2003) suggested that the attention of effective managers must include all of the eight roles. However, Belasen, et al. (1996: 87-117) argue that in transforming organizations, certain roles (transformational) become much more important for the implementation of organizational change. These roles are the broker, innovator, facilitator, and mentor roles. The transactional roles (monitor, coordinator, producer, and director) are relatively less important. As organizations adapt to change, leaders must increase their emphasis on a set of roles (the transformational) that is more compatible with the new technology and the new environment. Within the competing values framework, organizational transformation calls for a shift in emphasis among the roles. The roles in the flexibility quadrants (mentor, facilitator, innovator, broker roles) are expected to increase at the expense of the roles in the control quadrants: the coordinator, monitor, director, and producer roles. Belasen, et al. (1996: 87-117) research study indicated that managerial roles change in importance during periods of

significant organizational transition. Their research study concluded that during organizational transformation, managers clearly perceive the need to increase their emphasis on innovation, facilitation, brokering, and mentoring in order to enhance their contribution to the organization. Respondents in this study reported that the roles which emphasized flexibility and change (Mentor, Facilitator, Innovator, and Broker) were much more important before downsizing. As a result from the research study, the researchers describe the most important tasks and responsibilities of the eight leader roles, as shown in Table 2.4, during organizational transformation.

Table 2.4 The Most Important Tasks and Responsibilities by Roles

Managerial Role	Tasks and Responsibilities
Producer	• Maintains a high level of energy in motivating others • Creates high performance expectations in others, focusing on results
Director	• Sets objectives for accomplishing goals • Assigns clear priorities among multiple goals • Set goals in a participative context
Coordinator	• Reallocates resources to accommodate necessary changes in workflow
Monitor	• Sets up and maintains necessary communication channels • Disseminates information regarding changes in policies and procedures
Mentor	• Gives credit to subordinates for their work and ideas • Maintains an open, approachable and understanding attitude toward subordinates • Encourages participation in professional development activities

Table 2. 4 The Most Important Tasks and Responsibilities by Roles (Cont'd.)

Managerial Role	Tasks and Responsibilities
Facilitator	• Fosters a sense of teamwork among employees; helps subordinates resolve conflict • Works to enhance employee participation and a cohesive work climate • Involves subordinates in discussions over work matters; encourages participation in group decisions • Facilitates and leads meetings
Innovator	• Comes up with ideas for improving the organization • Suggests change in work processes and procedures to superiors • Personally helps individual employees adjust; turns problems into opportunities to change the organization • Encourages creativity among employees; helps employees deal with ambiguity and delay • Assesses the potential impact of proposed changes • Helps subordinates see the positive aspects of new changes
Broker	• Builds coalitions and networks among peers • Nurtures contacts with people external to the organization • Presents ideas to managers at higher levels; represents the unit to others in the organization; exerts lateral and upward influence in the organization • Represents the unit to clients and customers

In conclusion, this paper began with a brief review of key leadership concepts and the literature revealed that effective leadership in an organization is critical. For this research study, the transformational leadership-completing values framework

proposed by Quinn, et al. (2003) and Belasen, et al. (1996) is examined and used as the conceptual framework. Belasen, et al. (1996) suggested that in terms of whether leaders style should be transformational or transactional leadership, it appears from current evidence that leaders must increase their emphasis on a set of roles (the transformational) that is more compatible with the new technology and the new environment while organizations adapt to change. Senge (1990) also identified that personal power is not sufficient to influence transformational change. Rather, what is needed to succeed is individual charisma combined with an engaging vision, a set of personal values that others would wish to emulate, as well as an unbounded passion to serve as coach and mentor. Transformational leadership also demonstrates self-confidence and the leader is dominant in his/her strong conviction of the moral righteousness of his/her beliefs. Transformational leadership also represents charismatic and passionate leadership. Thus, transformational leadership (Mentor, Facilitator, Innovator, and Broker) continues to be the behavior that is presumed best for health services because transformational leaders can initiate and cope with change and create something new from something old. They are entrepreneurial, take risks, and are often informal in their relationships, and always seeking to develop individuals and respond to their needs and interests.

2.5 Leadership and the Learning Organization: Studies Related to the Research Study

If organizations are asked to learn, develop and utilize knowledge as a way to embrace change and to innovate, to solve problems and to accomplish tasks, there must be a catalyst to stimulate a learning environment. Senge (1990) suggested leadership has a vital role to play in creating these conditions. To explore the nature of leadership and how it influences the learning organization, the following section explains and explores several theories and research associated with leadership.

Senge, et al. (1999: 566-567) articulated a vision of the future described as the "learning organization." System leaders can encourage organizational members to consider and accept change by clearly communicating the collective vision and by seeking ways to enable and reinforce learning activities that support the vision. To

create and sustain a learning environment, leaders must perform three crucial roles. First, the designer role involves the development of opportunities, incentives, and resources that promote learning and the transformation of vision into practice. Secondly, the stewardship role involves ongoing efforts to ensure that the system's vision and its commitment to learning guide system activities as well as the activities of individual components. Third, the teaching role requires that leaders demonstrate how the system's vision and values relate to activities at the local level and how local activities affect the larger system.

Feigenbaum (1993: 7-10) reports his research study in managing improvement in the U.S. government that transformational leadership is required to enforce total quality management in the US government. Improvement through leadership is achieved by utilizing the skills of employees and their knowledge and willingness to innovate, solve problems democratically, and encourage teamwork. The characteristics governmental institutions must consider in order to successfully implement total quality management are leadership with characteristics of a definite vision to improve, determination in focusing on goals, skill in using human resources, and the ability to manage task accomplishment with teamwork.

This article examines the roles of organizational leaders in fostering goals of becoming a learning organization. It suggests that the leader's role is pivotal in determining the success or otherwise of a learning initiative. Unsigned article (2003: 19-21) identified characteristics of leadership competencies and behaviors that have proven to be effective in creating and maintaining learning organizations. The review of this paper has led to an initial identification of the three characteristics of leaders of learning organization, which are:

1) Vision and commitment are vital
2) See a learning organization as a solution to a problem
3) Foster a learning culture

Coad and Berry (1998: 164-172) explored the links between transformational leadership and learning orientation via a large sample of accounting professionals. Respondents' perceptions of leadership behavior were examined using the factors of transactional and transformational leadership identified by Bass (1985) and Bass and Avolio (1994). The research finding revealed that transformational leadership was

correlated with learning orientation and management by exception (as a form of transactional leadership) was less strongly associated with performance orientations. The results from this study gives some support to the conjecture that learning organizations should adopt more transformational styles of leadership, perhaps entering a progressive spiral of development and reinforcement of leadership style and followers' orientation to learn (Coad and Berry, 1998: 164-172).

Johnson (1998: 141-150) proposed a model of leadership and the stages of a learning organization. The model proposed by this author utilizes the three leadership behaviors of visioning, empowerment, and leading-learning, and is offered as a catalyst for improved practices as well as food for thought for researchers who aspire to build theoretical relationships between leadership behavior and a learning organization while embracing change.

Ellinger and Bostrom (2000: 752-771) studied the role of leaders and managers in building learning capability and learning organizations. The research study suggested leaders and managers will assume roles such as facilitators of learning, coaches, and teachers. The role of facilitative learning in leadership included two clusters of behavior sets that were identified as follows:

1) Empowering cluster:
    (1) Question framing to encourage employees to think through issues
    (2) Being a resource-removing obstacles
    (3) Transferring ownership to employees
    (4) Not holding back on the providing of answers
2) Facilitating cluster:
    (1) Providing feedback to employees
    (2) Soliciting feedback from employees
    (3) Working it out together-talking it through
    (4) Creating and promoting a learning environment
    (5) Setting and communicating expectations-fitting into the big picture
    (6) Stepping into the other's place to shift perspectives

(7) Broadening employees' perspectives-getting them to see things differently

(8) Using analogies, scenarios, and examples

(9) Engaging others to facilitate learning.

Barnsley, Lemieux-Charles and McKinney (1998: 18-28) drew upon theory, empirical research, and real-world examples of learning in health care and other organizations and suggested ways in which integrated delivery systems can create a climate for system-wide learning and facilitate the rapid dissemination and use of new managerial and clinical knowledge. The three researchers identified three conditions that are critical for the generation, dissemination, and use of knowledge in integrated delivery systems: (1) a shared vision of the system's goals and the ways in which learning can contribute to these ends; (2) leaders with the facilitative role who ensure that opportunities, resources, incentives, and rewards support learning; and (3) an organic structure with diverse communication channels that efficiently transfer information across organizational boundaries (Senge, 1990; Garvin, 1993). They also pointed out the characteristics for facilitative leadership will have different performance between the enabling and reinforcing activities phase as follows:

1) Enabling activities

(1) provide incentives for the learning and use of new knowledge and skills

(2) support risk taking

(3) provide opportunities to apply new knowledge and skills

(4) develop budget practices that support learning and knowledge transfer

(5) establish cross-organizational and multidisciplinary teams

(6) groom managers to lead cross--organizational and multidisciplinary teams

(7) decentralize decision making.

2) Reinforcing activities

(1) link performance review and career progression to the application of innovative knowledge and skills

(2) monitor post-training performance and provide feedback

Shortell, et al. (1993: 447-466) explained that the "new management culture" for integrated delivery systems requires team learning to be a characteristic of the facilitator. Some of the key concepts include: managing care across episodes of illness, systems thinking, and the blurring of the distinction between line and staff roles. Increasingly, systems are forming interdisciplinary teams that are responsible for managing selected services across the continuum of care for defined groups of patients in health-care settings. Thus, managerial roles are being redefined to emphasize leadership of cross-organizational teams rather than individual departments. These managers set performance targets and provide direction and coaching until the teams have developed to the point where they can function on their own.

Gephart, et al. (1996: 39) suggested that leaders and managers at all levels in a learning organization provide critical support to the learning and development of individuals and teams by:

1) Modeling learning behavior
2) Providing systems that facilitate learning.
3) Encouraging people to contribute new ideas.
4) Ensuring the dissemination of knowledge and learning.
5) Freeing resources in order to signal the organization’s commitment to learning.
6) Sharing leadership.

Managers in learning organizations can also be vital links for disseminating knowledge and learning by seeking solutions from different areas of the organization and by sharing successes and failures with other managers. When best practices are shared regularly across an organization's functions and divisions, people's commitment to learning strengthens. Gephart, et al. (1996: 39-40) showed the example of the role of facilitative and shared leadership in General Electric's Corporate Executive Council, made up of the heads of 12 business units. The leaders met quarterly--not to review financial data but to share information. At 3M, similar councils also meet regularly to examine best practices within and outside the company. The councils shared ideas and concerns, and they brought in experts to stimulate broad-range thinking.

In conclusion, the literature review suggests that effective leadership practices in building learning organizations should integrate many aspects of leadership to encourage members of the organization to embrace change successfully. The role of facilitator plays a major role in establishing the infrastructure for learning organizations. Facilitative leadership can encourage organizational members to consider and accept change by clearly communicating the collective vision and by seeking ways to enable and reinforce learning activities that support the vision (Senge, 1990; Shortell, et al., 1993; Watkins and Marsick, 1996; Gephart, et al., 1996; Barnsley, Lemieux-Charles and McKinney, 1998; Johnson, 1998; Ellinger and Bostrom, 2000). Senge (1990) also strongly agrees in the concept of facilitative leadership, in that the leader who has responsibility for influencing or creating changes must transform him/herself from the traditional role of "manager" to one of becoming a facilitator, coach, and teacher where the creation and application of knowledge is fostered. In accordance with the above-mentioned literature, the facilitative leadership role will be constructed and employed as a variable in this study. As a result, this research seeks to discover how and in what ways leaders facilitate group processes where individual tacit knowledge is transformed into explicit group knowledge.

2.6 The Organizational Culture

A great deal of work regarding organizational culture occurred in the 1980's. Culture is a concept borrowed originally from the field of anthropology and is considered to be the total sum of all contributions of a group of people, in a designated area, within a given time. The concept of culture has been widely examined by several disciplines such as anthropology, archaeology, art, education, history, and sociology. Schein (1992: 7-8) said the word culture has many meanings and connotations. Thus, the most useful way to think about culture is to view it as the accumulated shared learning of a given group, covering behavioral, emotional and cognitive elements of the group member's total psychological functioning.

2.6.1 Definition

The definition of organizational culture varies as much as the view of the concept itself. In an effort to reach a consensus on a definition of organizational culture (OC), Cameron and Quinn (1999: 14-16) have described organizational culture as the reflection of what is valued, the dominant leadership style, the language and symbols, the procedures and routines, and the definitions of success that characterize an organization. Organizational culture, thus, represents the values, underlying assumptions, expectations, collective memories, and definitions present in an organization. Brown (1998: 9) also identified organizational culture as the pattern of beliefs, values and learned ways of coping with experiences that have developed during the course of an organization's history, and which tend to be manifested in its materials arrangements and in the behaviors of its members. Regarding Mogan (1986: 135), the culture metaphor points toward another means of creating organized activity: by influencing the language, norms, folklore, ceremonies, and other social practices that communicate the key ideologies, values, and beliefs guiding action. According to Smircich (1983: 339-358), culture can be defined as the set of key values, assumptions, understandings, or ways of thinking that are shared by members of an organization and taught to new members as correct. At its most basic, culture is a pattern of shared assumptions about how things are done in an organization. This pattern is invented or learned as organizational members cope with internal and external problems and in turn is taught to new members as the correct way to perceive, think, and feel in relation to those problems (Schein, 1992: 12).

Furthermore, organizational culture has also been identified as having a culture level. This term refers to the degree to which the cultural phenomena are visible to the observer. These phenomena could vary from a very tangible open manifestation to a very intangible embedded (unconscious) manifestation. In this perception, the level of organizational culture can be divided into three manifestations has been proposed by Schein (1992: 17-26) and shown in Figure 2.11 as follows:

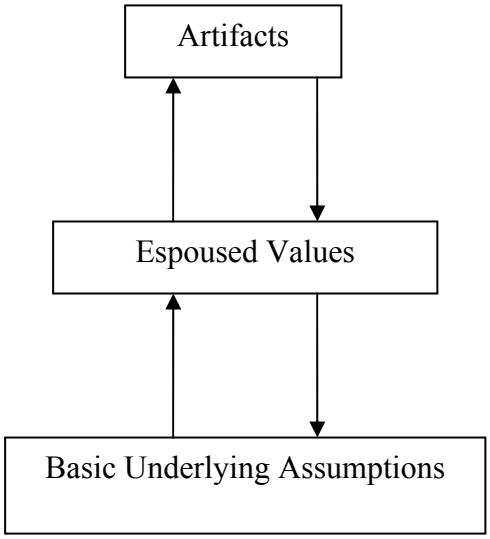

Figure 2.11 The Cultural Dimensions: Hierarchical Model
Source: Schein, 1992: 17.

1) Artifacts are the visible organizational structures and processes. The artifacts level is the most superficial level and includes all that one can see, hear and feel when exposed to a group with a different culture. Artifacts include visible products of the group, such as the physical environment, language, technology, and products and services. Artifacts also include style reflected by type of clothing, manners of address, myths and stories, and rituals and ceremonies. This level of culture is easy to observe, but difficult to interpret in practice.

2) Espoused values are considered organizational justifications. They are strategies, goals, and philosophies. A solution to a certain problem an organization is facing can come from an individual usually identified as a leader in the group, although the proposed solution only reflects the individual's own assumptions about reality. As a result, whatever is proposed as a solution will not have the status of a value until it emerges from the group. Members of the group should have taken joint action and together observed the outcome of that action. Some values are thought to be promulgated by prophets, founders, and leaders in the organization and they work

to reduce uncertainty in the group. As the values continue to work, they become embedded in the philosophy or ideology of an organization.

3) Basic assumptions are unconscious at the culture level and include beliefs, perceptions, thoughts, and feelings. Basic assumptions are different from dominant value orientations. Basic assumptions tend to be those theories -in-use that a group neither confronts nor debates. Problem solutions are hypotheses supported by a value. Once a solution to a problem works repeatedly in an organization it begins to be treated as a reality, as the way nature works. This level of culture is critical for a learning organization, because it causes the group to reexamine basic assumptions and possibly change some of the more permanent portions of cognitive structure, which is extremely difficult, but not impossible (Schein, 1992: 21-26).

According to Schein (1992: 53-68), one of the core components of culture is related to assumptions about organizational identity, its mission, and the related strategy. Schein (1992) continued that such a strategy is concerned with the evolution of the mission, and with the relationship between the mission and operational goals. It is also postulated that as consensus develops related to mission, goals, and the means to achieving the organizational goals, the organizational culture is simultaneously evolving. This evolving culture also includes the skills and knowledge acquired by an organization as it encounters challenges from its environment.

In summary, many of the recent research studies use definitions that are comprised of three elements. The first includes phrases such as “commonly held” or “shared” meaning with which all members are in agreement (Schein, 1992: 8). The second element includes one or more of the following words: “belief and/or values, attitudes, assumptions, ideologies, norms, meanings” to define culture (Smircich, 1983; Morgan, 1986; Schein, 1992; Brown, 1998). The third element implies that the combination of the first two elements is what holds the group together. The degree to which an organizational culture is consciously and overtly rather than unconsciously and covertly manifested, influences how easily organizational culture can be managed and changed. When organizational culture change involves changing surface-level behavioral norms and artifacts, change can occur with relative ease. At the deepest levels of organizational culture, namely assumptions, ideologies, and human nature, it is very difficult and time consuming to try to create organizational culture changes.

Thus, the process of identifying and changing organizational culture is affected by the level of organizational culture under consideration. When organizational culture changes only in the superficial level, the outcome of changing is in overt compliance and not covert acceptance, and might be difficult to sustain. To embrace change successfully, changing organizational culture in the deepest level clearly is required, which results in explicit commitment and acceptance. Changing underlying assumptions is difficult and time consuming to implement, but is likely to result in changes that last and are felt in everything the organization members do. Therefore, the organizational culture model defined by Schein (1992) is used to investigate the value and underlying assumptions of health care personnel held in a health care organization.

2.6.2 Four Culture Orientations

The organizational culture framework to be used in this study is based on a theoretical model called the "Four Culture Orientations". Harrison and Strokes (1992: 14-22) originally developed this model as the result of research in the area of organizational effectiveness. The framework is useful in identifying how multiple organizational phenomena interact. Each of the four cultural orientations defines a set of core values, assumptions, interpretations, and approaches that characterize organizations.

The purpose of the four culture orientations is to diagnose and facilitate the social process of change in an organization. The model has been found to be in agreement with well-known and well-recognized models about the way people organize their thinking, their values and assumptions, and also in the way people process information. According to McKenna (1992: 25), the Harrison model proposes four main cultural roles (power, role, achievement, and supportive); how each of the four culture roles relates to the operation of the culture is found in Table 2.7. The fundamental characteristics of each of the four culture types are:

2.6.2.1 Power

A power-oriented organization is based on inequality of access to resources. A resource is anything one person or a group controls that another person or group wants. In an organization, some examples of power are money,

privileges, job security, working conditions, and the ability to control access of others to these resources.

The people in power use resources to satisfy or frustrate the needs of others, and thus control their behavior. People in power-oriented organizations are motivated by rewards and punishments, and by the wish to be associated with a strong leader. Leadership in a power-oriented organization is based on strength, justice, and benevolence on the part of the leader, Leaders are fair, and generous as they have a sense of obligation to their followers. They exercise power according to their understanding of what is good for the organization and its people.

2.6.2.2 Role

The role culture substitutes a system of structures and procedures for the naked exercise of power by the leaders. Structures and systems give protection to subordinates and stability to the organization. The struggle for power is moderated by rules. In addition, the duties and rewards of member roles are carefully defined, usually in writing, and are the subject of an explicit or implicit contract between the organization and the individual. People perform specific functions in order to receive defined rewards. Both the individual and the organization are expected to adhere to their parts of the bargain.

The values of role-orientation are order, dependability, rationality, and consistency. A well-designed system of roles (bureaucracy) in which performance is organized by structures rather than personally controlled by the leader, permits work to be reliably directed at a distance so that large complex organizations can be created and managed.

Each level in the organization has a defined area of authority; work can continue to be done without direct supervision from the top. The weakness of the role organization is in the very impersonality, dominantly perceived as strength. Such organizations operate on the assumption that people are not to be trusted. As a result, individual autonomy or discretion is not given to members at lower levels. The system is designed to control and prevent people from committing selfish or stupid acts. It also keeps people from being innovative and from doing the right thing when the right thing is outside the rules. In the interests of rationality and

order, it is difficult to change or bend the rules, and it usually takes a long time to make the needed changes.

2.6.2.3 Achievement

The achievement-oriented organization has been called the aligned organization because it lines people up behind a common vision or purpose. It uses the mission to attract and release the personal energy of its members in the pursuit of common goals. The mission serves to focus the personal energy of individuals. Because members make their contribution freely in response to a shared purpose, they willingly give more to the organization, and the whole organization prospers accordingly. This inner commitment is in marked contrast to the power and role-oriented organizations, which rely on the application of rewards and punishments and on impersonal systems and structures to control and constrain members.

2.6.2.4 Support

Members in a support-oriented organization support one another in the work and go out of their way to cooperate. Organization members value harmony. They make sure that conflicts are resolved and that everyone is on board. Organizational members give their time and energy to others. They are available. They care. They listen. Organizational members trust that they are viewed as individual human beings by the organization. Members appreciate one another and acknowledge one another's contributions. Organizational members have a sense of belonging and feel accepted by those they work with. They like spending time together.

Table 2.5 Cultural Types and The Functions of Culture

Cultural Role	Goals and Values	Intraorganizational relationship	Control of behavior	Qualities/ Characteristics valued	Employee interaction	Appropriate individual / organizational relation to the external environment
Power	Centrally driven	Built upon relative position of power	Controlled by power	Decisiveness	Centre-out	Competitive
Role	Functionally driven	Built upon bureaucratic position	Control by bureaucracy	Rationality	Top-down	Functional
Achievement	Project / process driven	Built upon expertise	Controlled by knowledge / expertise	Expertise	Task group	Cross-functional Co-operative
Supportive	People-driven	Built upon the needs of people	Controlled by personal preferences	People person	Person-centered	Consensual

Source: McKenna, 1992: 25.

2.7 Organizational Culture and the Learning Organization: Studies Related to the Research Study

This study endeavors to apply our current understanding of the learning organization and organizational culture in addressing the research question. Building learning organizations is an attempt to manage the culture of that organization. Organizational culture is one of the key factors that impacts on and contributes to sustained, long-term organizational learning. Many researchers believe that culture affects all of the other factors and conditions, which indirectly and directly affect the organization's ability to learn, unlearn, and relearn new practices.

Pool (2000: 373-378) studied the learning organization: motivating employees by integrating the total quality management (TQM) philosophy in a supportive organizational culture. A descriptive study was conducted investigating the relationships of TQM, organizational culture and their impact upon a learning organization. The study investigated the attributes of a learning organization and its influence upon employee motivation. A total of 307 executives participated in the survey. The executives completed a questionnaire measuring their perceptions involving the principles of a learning organization, TQM attributes, and their organizational culture. The results indicate a corporation implementing TQM principles in a supportive organizational culture has a positive and significant relationship with organizational learning compared to those executives not exposed to these constructs. This research study found that a supportive organizational culture will encounter higher levels of organizational learning. The organizational culture construct is significant at the $p < 0.01$ level and has a direct positive relationship with the characteristics of a learning organization. The essential attributes measured in a supportive culture are open communication, trust, innovation, providing challenging work, and cohesion among employees in this study. Organizational learning increases when executives perform their assignments in a supportive organizational culture. The results of this research study suggest there is a strong correlated relationship between a supportive culture and the higher levels of learning in an organization.

Sherer (1994: 21) reported that learning in an organization's corporate culture requires knowing instinctively how to get ahead, how to stay out of trouble, and how

the organization works. Every organization has a corporate culture and is shaped by the leader or by the organization itself.

Organizational culture is, as aforementioned, a clarification of a set of symbols, language, assumptions and behaviors that manifest themselves in a setting.

According to Schein (1992: 174-179), the learning process also impacts culture, if consensus develops related to the value and use of the new skills and knowledge. The culture in a learning organization is characterized as one that values learning, where:

1) Members are responsible for the shared learning;
2) Trust and autonomy are the norm;
3) Innovation, experimentation and risk-taking are encouraged;
4) Resources are committed to learning;
5) Change and challenges are viewed as opportunities;
6) Quality of work life is supported (Marquardt, 1996: 70-73)

The conclusion of Marquardt (1996: 69) is that the traditional organizational culture is anti-learning by discouraging risk-taking, trying new ideas, and sharing information. Shifting the mind-set of the organizational culture from a market/rigid culture to a clan/adaptive culture is essential for organizational transformation success (Daft, 1999: 220-221). To become a learning organization, the culture encourages openness, boundarylessness, equality, continuous improvement, and change (Daft, 1999: 221).

According to Davies and Nutley (2000: 998-1001), a learning organization requires attention to some key cultural values, if it is to be a successful undertaking. Thus, they proposed the nine perspective cultural values in the Health National System. The cultural values that are held in healthcare professional organizations, in order to build learning organizations, are adapted from Mintzberg, Ahlstrand, and Lampel (1998: 214-215) and are outlined as follows:

1) Celebration of success. If excellence is to be pursued with vigorousness and commitment, its attainment must be valued within the organizational culture.

2) Absence of complacency. Learning organizations reject the adage "if it isn't broke, don't fix it".

3) Tolerance of mistakes. Learning from failure is a prerequisite for progressive organizations. This requires a culture that accepts the positive spin offs from errors, rather than seeks to blame and scapegoat.

4) Belief in human potential. It is people who drive success in organizations—using their creativity, energy, and motivation. Therefore the culture within a learning organization values people, and fosters their professional and personal development.

5) Recognition of tacit knowledge. Learning organizations recognize that those individuals closest to leadership, possess the best and most intimate knowledge of their potential and flaws. Therefore, learning culture values tacit knowledge and shows a belief in empowerment (the systematic enlargement of discretion, responsibility, and competency).

6) Openness. Because learning organizations try to foster a systems view, sharing knowledge throughout the organization is one key to developing learning capacity.

7) Trust. For individuals to give of their best, take risks, and develop their competencies, they must trust that such activities will be appreciated and valued by colleagues and managers. In particular, they must be confident that should they make a mistake, they will be supported and not reprimanded. In turn, managers must be able to trust that subordinates will use wisely the time, space, and resources given to them through empowerment programmes—and not indulge in opportunistic behavior. Without trust, learning is a faltering process.

8) Outward looking. Learning organizations are engaged with the world outside as a rich source of learning opportunities. They look to their competitors for insights into their own operations and are attuned to the experiences of other stakeholders such as their suppliers. In particular, health care organizations are focused on obtaining a deep understanding of patients' needs.

According to Gephart, Marsick, Van Buren, and Spiro (1996: 40), an open, trusting culture in which there is no blame creates the freedom for people to take risks and express their views. In The Global Learning Organization, Marquardt and Reynolds (1999 Quoted in Gephart, et al. (1996: 40) describe an employee-involvement program at General Electric called Work Out, which began to transform

its climate from one of distrust between workers and management to one of mutual respect and cooperation. The outcome of Work Out helps foster an open, trusting culture and employees' enthusiastic involvement in solving problems at GE.

A field study examined the effects of a learning organization's variables on organizational learning and on performance drivers. Four hundred and thirty-nine employees of a nuclear power production facility completed inventories asking about perceptions of the organization. Variables measured through a learning lens included leadership, culture, mission and strategy, management practices, organizational structure, organizational systems, climate, motivation, learning, innovation, and external alignment. Findings suggest strong consistent roles of leadership, culture, mission and strategy, and structure in explaining learning. Management practices, climate, and motivation were less effective in predicting learning (Kaiser, 2000: xii).

Kilne and Saunders (1993) built on the concept of the learning organization as identified by Peter Senge. The researchers stress that a learning organization is one that affirms everything an organization must do to achieve its goals. They have characterized sixteen principles implicit in successful organizational cultures. Organizations positioning for the future must address the corporate culture for the presence of the following principles:

1) Prime the mind of individuals at every level to be self-directed.

2) View mistakes as stepping-stones to continuous learning, and essential to further business growth.

3) Be willing to rework organizational systems and structures of all types.

4) Consider the corporate culture a supportive place to be.

5) Celebrate the learning process for its own sake, not just its end process.

6) Celebrate all learners equally.

7) Accomplish as much transfer of knowledge and power from person to person as possible.

8) Encourage and teach learners to structure their own learning, rather than structuring it for them.

9) Teach the process of self-evaluation.

10) Recognize and accept as a goal the complete liberation of all human intelligence everywhere.

11) Recognize different learning preferences as alternate tools for approaching and accomplishing learning.

12) Encourage people to discover their own learning and thinking styles and make them accessible to others.

13) Cultivate each employee's abilities in all fields of knowledge, and spread the idea that nothing is forever inaccessible to people.

14) Recognize that in order to learn something so it is easy for you to use, it must be logical, moral, and fun.

15) Achieve development of ideas through dialogue and discussion.

16) Make re-examination and investigation a component of every action (Kilne and Saunders, 1993: 16-18).

Gephart, et al. (1996: 39) view culture as the glue that holds an organization together. They classify a learning organization's culture into four perspectives as follows:

1) Supports and rewards learning and innovation.

2) Promotes inquiry, dialogue, risk taking, and experimentation, openness and trust.

3) Allows mistakes to be shared and viewed as opportunities for learning, mutual respect and cooperation.

4) Values the well-being of all employees.

In conclusion, health care organizations undergo major redesigns of their care delivery processes within the concept of continuous quality improvement through Hospital Accreditation. To be successful in changing and sustaining quality after the change, health care organizations' emphasis should be placed on organizational culture and its role in facilitating or inhibiting change. The culture, being the medium, context or venue, will make human behavioral change either relatively fluid (as in an organization with a supportive / achievement culture) or very cumbersome if not impossible (as with a power / role culture). The culture either supports or hinders behavioral change. Thus, there are several important attributes that emerge from the review of related literature. Organizational culture absolutely impacts on employees'

performance because organizational culture is a major behavioral influence for individuals and groups operating within the context. Many research studies suggested that a supportive culture enhances organizational learning and then leads to improved organizational performance. Therefore, a supportive organizational culture is essential in promoting a higher level of learning in organizations (Pool, 2000). Thus, to become a learning organization, the culture characterizes encouraging openness, boundarylessness, equality, continuous improvement, and change (Daft, 1999). Responsibility for shared learning, trust and autonomy being the norm, advocating challenging work, quality of work life (Marquardt, 1996; Watkins and Marsick, 1996) are essential attributes defining a supportive culture and an achievement culture (Harrison and Strokes, 1992).

From the above mentioned of the literature review, it can be concluded that leadership behavior's role and organizational culture influence the development of learning organizations. Thus, a conceptual framework of this research study is based on the relationship among three major variables, which will be presented in the following section.

2.8 A Conceptual Framework of the Study

The conceptual framework for this study will draw on four main theories and elements from many scholars from the literature review. It will focus on the attributes of a learning organization, the type of organizational culture, and the leadership role. The researcher intends to clarify and synthesize the elements of a learning organization, organizational culture, and leadership role to create a possible conceptual framework for this research study. From the literature review, it can be shown that a learning organization could not have been achieved without the contribution of some interrelated concepts. To become a learning organization in health care, leadership, culture, and the development of the learning organization must be addressed. Thus, Figure 2.12 demonstrates a conceptual framework used to investigate the impact of the leadership role and organizational culture which results in the development of learning organizations at certified accredited hospitals in Thailand. This model summarizes the three main constructs: leadership role,

organizational culture, and the learning organization. The framework of schematic representation of the identified variables, shown in Figure 2.13, represents a concept of how the variables in the study are interrelated.

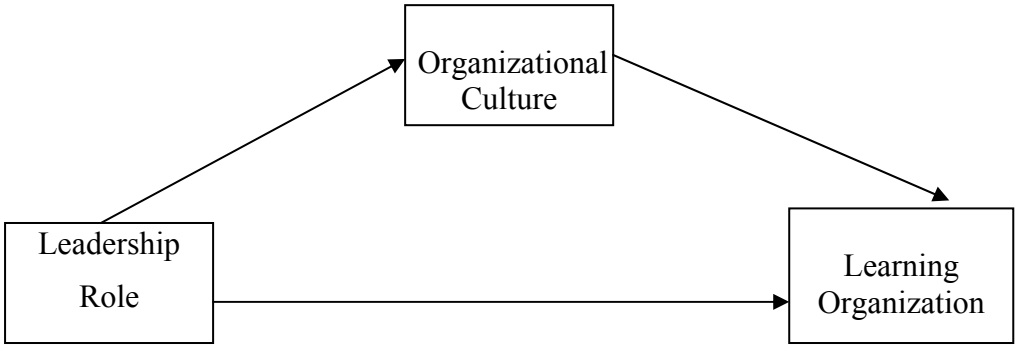

Figure 2.12 The Conceptual Framework of the Study

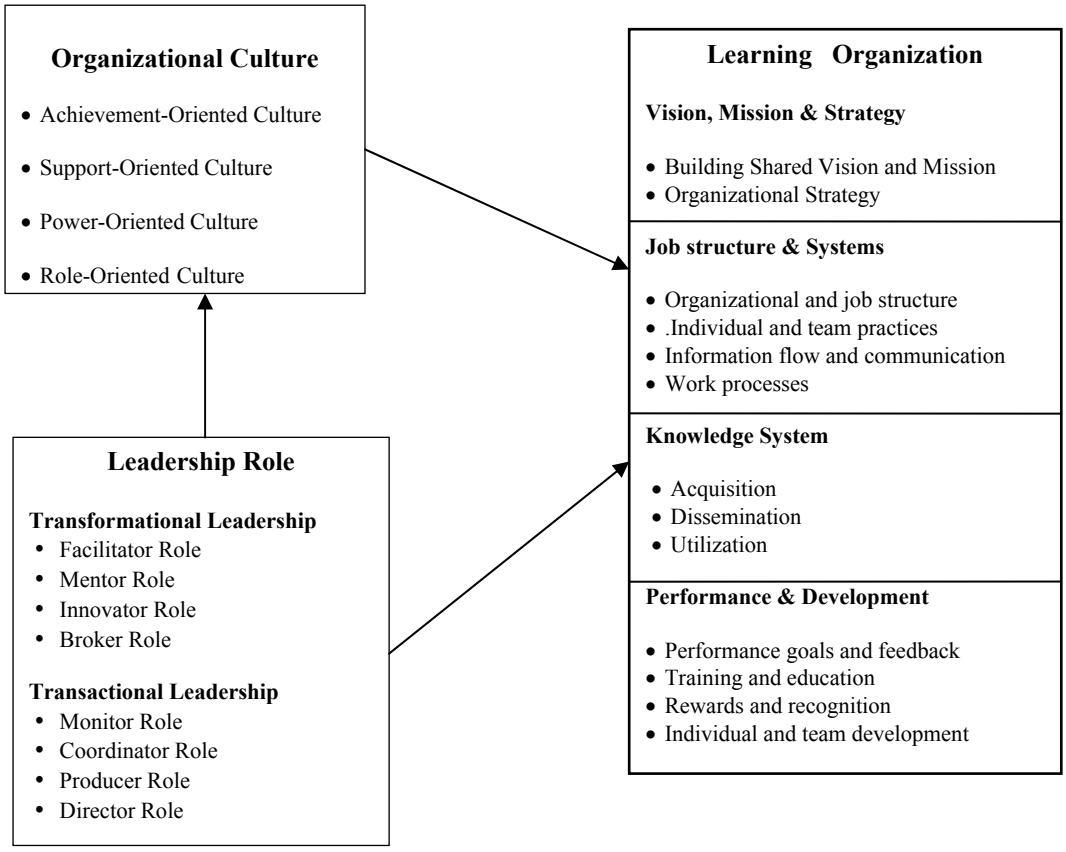

Figure 2.13 Schematic Representation of the Identified Variables for the Study

2.8.1 Leadership as a Key

The first construct, which has been viewed as key to organizational change, is leadership. The health care environment is one of extreme uncertainty, intense competition, and dramatic change, and is experiencing a demand for effective leadership to improve organizational performance. In a highly competitive environment, employees are encouraged to take calculated risks, to deal with uncertainty, and to innovate. Such an environment requires a transformational leadership style in a nonhierarchical organization. Managers are seen as coaches, not controllers; level or rank is not as important as the ability of the individual to contribute to the organization's performance (Senge, 1990: 34-40). Leaders need the skills to facilitate change. Leaders should also be able to provide useful feedback to employees and teams to help them identify problems and opportunities. Leadership in a learning organization means involving employees in decision-making. Leaders should also be willing to accept criticism without being overly defensive and to learn from it. The transformational and transactional leadership of the framework is adopted from Quinn, et al. (2003: 16) competing values framework, which is depicted and explained in this chapter. This framework describes four transformational roles (upper half) and four transactional roles (lower half) performed by effective managers. Therefore, it is clear that effective leadership behavior is a key ingredient for the success of the learning organization. A participative leadership style is required, with high levels of facilitation and coaching skills.

2.8.2 Organizational Culture as a Key

The second construct which has been implicated as a key variable in efforts to explain health care transformation is culture. Transformation to a new paradigm generally begins with the organization’s values, beliefs, and norms, which are essential elements of the organizational culture. The organizational culture thus becomes the catalyst that enables a successful response to the environmental demands. The successful health care organization recognizes that learning how to implement hospital accreditation occurs simultaneously at the individual, group, and organizational level, but is influenced and essentially directed by the actual culture that exists. The health care organizational culture is viewed by health care personnel

as the vehicle for bringing about this change. Basic shifts in how organizational members think and interact are required. Expectations for individual, group, and organizational levels of performance are both influenced and directed by culture, which directs member behavior.

The organizational culture framework used in this study is based on a theoretical model called the "Four Culture Orientations". Harrison and Strokes (1992: 14-22) originally developed this model as the result of research in the area of organizational effectiveness. The framework is useful in identifying how multiple organizational phenomena interact. Each of the four cultural orientations defines a set of core values, assumptions, interpretations, and approaches that characterizes organizations.

2.8.3 Learning Organization as a Key

The third construct variable for this research study is the "learning organization", which is viewed as an important concept for hospitals involved in quality improvement activities. Learning is a key because quality improvement programs require a commitment to learning (Garvin, 1993: 91). Garvin believed that successful learning companies like Honda, Corning, and GE have managed their learning capability to ensure that it occurs by design rather than by chance. These companies have implemented unique policies and managerial practices that have made them successful learning organizations (Garvin, 1993: 80-81).

In essence, being a learning organization requires an understanding of the strategic internal drivers needed to build a learning capability (Stata, 1989: 63-74). This paper synthesizes the description of management practices and policies alluded to in the literature about learning organizations. Only those mentioned repeatedly by many writers were considered as differentiating management practices of an effective learning organization.

Consequently, the learning organizational practices in the conceptual framework are taken from the Learning Organization Practices Profile (LOPP), a questionnaire developed by Bennett and O'Brien (1994: 41-49), with some modifications for use in health care organizations obtaining accreditation with commendation. These modifications are explained in Chapter 3. The executive

practices, managerial practices, and climate are omitted as they overlap the concept of roles of transformational and transactional leadership behavior and types of organizational culture. In order to measure attributes of a learning organization with completeness, it is essential to study how an organization learns because the success of quality improvement is related to an organization's ability to learn, to absorb, to adapt and to apply conceptual changes and integrate them throughout the organization (Hill, Hazlett and Meegan, 2001: 142-144). Therefore, the organizational learning cycle proposed by DiBella, Nevis and Gould (1995: 74-75) is employed and combined into the conceptual framework of this study.

2.9 Research Hypotheses

The combined rationales for the conceptual framework outlined earlier leads to the following hypotheses:

2.9.1 Hypothesis One - Administrator's Perception

H1: Leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators are significantly related to the overall learning organization.

Hypothesis One is sub-divided into four sub- hypotheses:

H1.1: Leadership behaviors as perceived by administrators are significantly related to vision / mission and organizational strategies.

H1.2: Leadership behaviors as perceived by administrators are significantly related to organizational and job structure.

H1.3: Leadership behaviors as perceived by administrators are significantly related to knowledge system.

H1.4: Leadership behaviors as perceived by administrators are significantly related to performance goal and individual / team development.

2.9.2 Hypothesis Two -Subordinate's Perception

H2.1: The development of a learning organization is directly affected by leadership behaviors.

H2.2: The development of a learning organization directly is affected by a current organizational culture (achievement, support, role, and power–oriented culture).

H2.3: A current organizational culture is directly affected by leadership behaviors.

2.10 Conclusion

In this review of the literature, the conceptual model for this study, shown in Figure 2.12, is based on three main constructs: leadership role, organizational culture and learning organization. In particular, at the variable level the study will examine transformational and transactional chief executive leadership role. Quinn, et al. (2003) theory of competing values framework provides the theoretical base for this research. This theory expanded the original concept of behavioral complexity of leadership role as a portfolio of capabilities. It is important to understand the competencies of leadership role and how it has evolved to its present state.

The organizational culture in the conceptual model was selected because they are the factors that chief executives influence to affect learning organizations. The organizational culture framework used in this study is based on a theoretical model called the "Four Culture Orientations" (Harrison and Strokes, 1992). Since the leaders use their competencies in organizations in a variety of ways to influence organizational outcomes through the organizational culture. In terms of culture, leadership, as suggested, plays a critical role in promoting the development of culture and, more specifically, a learning culture. The vision, values and sense of purpose that bind healthcare members of a hospital together can help them understand and absorb the mission and challenge of the whole hospital. Finally, core values of organizational culture, being the medium variable, are important. Chief executives create organizational cultures (Schein, 1992). The values, beliefs, and assumptions of chief executives influence the culture which affects learning organization.

Learning organization is the other construct that forms the theoretical base for this study. If organizational members are asked to learn, develop and utilize knowledge as a way to embrace organizational change and to accomplish assigned tasks, there must be a catalyst to stimulate a learning environment. Thus, leadership roles and organizational culture are important variables to create these conditions. Therefore, the linkage among the leadership role, organizational culture type, and learning organization is significant because it connotes that leaders impact the overall operation of an organization. How an organization operates or functions relates to how it performs and its learning as well as an existing culture. Therefore, the learning organization proposed by Bennett and O'Brien (1994) and the concept of organizational learning proposed by DiBella, Nevis and Gould (1995) are employed and combined into the conceptual framework of this study.

The next chapter will describe the research methodology employed in this study, including the sample, design and procedure, instrumentation, research questions and operational definitions.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used in this study to examine the self-report measures of transformational and transactional leadership of hospital chief executives. As well, data on subordinate's perceptions of leadership behaviors and organizational culture and perceived effect on learning in health care organizations that have received Hospital Accreditation, were gathered. The objective of this chapter is to describe the research procedures employed in designing and conducting the study. The following sections are included in the chapter: 1) Research Design, 2) Population and Sampling, 3) Instruments, 4) Data Collection, and 5) Data Analysis.

3.2 Research Design

This research study is classified as a non-experimental quantitative and qualitative design. The study design has two phases. The first phase involves using quantitative instruments. In the first phase, multiple regression and path analysis were selected to further investigate the relationships between behaviors of transactional and transformational leadership and organizational culture and attributes of a learning organization. The first hypothesis, which was sub-divided into four sub- hypotheses, was used to determine the relationship between transactional and transformational leadership behavior and the learning organization and each of its attributes. To study the magnitude of the perceived impact of transactional and transformational leadership behavior on a learning organization, stepwise multiple regression was employed.

For the second hypothesis, which was sub-divided into Hypothesis 2.1, 2.2 and 2.3, path analysis was employed. It was decided to scrutinize both the direct and indirect effects of dimensions of transactional and transformational leadership behavior and organizational culture on the learning organization. Therefore, the causal model relating the exogenous variable (leadership behavior) to the endogenous variables (organizational culture and learning organization) is introduced in this Chapter.

For the second phase, interviews were conducted with selected sample participants in order to gain a deeper understanding of the focus of the inquiry and to contribute important knowledge to the field, rather than to enhance generalizability.

3.3 Population and Sampling

3.3.1 Sampling Frame

The unit of analysis for this study was the perception of the hospital's employees from different levels and jobs involved with quality improvement programs. The samples who participated in this study were permanent employees from both public and private hospital sectors located in Thailand. The hospitals had been accredited and certified by HAT since 1995. The population selected for this study was based on the guidance provided by Hoelter (1983 Quoted in Bollen, 1989: 277) that a sample size greater than 200 is needed to perform structural equation modeling.

3.3.2 Sampling Strategy

The sampling frame used was obtained from The Institute of Hospital Quality Improvement and Accreditation (The Institute of Hospital Quality Improvement and Accreditation, 2001), which consisted of 50 hospitals. In order to obtain a set of appropriate samples to generalize the whole employee spectrum of those hospitals, the sampling design was conducted based upon non-probability sampling. All hospitals with Hospital Accreditation, meeting the following criteria were selected in a purposive sampling; they were medium sized hospitals with more than 100 beds, and were either a public or private hospital. A total of 25 hospitals met these criteria.

Only nine hospitals, located in various parts of Thailand, were willing and agreed to participate in this research study.

From this list, the sample method utilized was a probability sampling method. Simple random sampling was used. Therefore, it is reasonable to generalize the results from the sample back to the population. Hospitals that met the criteria had approximately 20,000 employees. Thus, the sample size estimation at 95 % confidential interval was 377 samples selected from both sectors (Welch and Comer, 1983: 158). The size of bed occupancy and year of hospital accreditation with commendation are illustrated in Table 3.1.

Table 3.1 Participating Hospitals

Hospital's name	Type	Number of Beds	Year of HA with commendation
Hospital A	Private	300	January, 2002
Hospital B	Private	500	April, 2001
Hospital C	Private	500	January, 2002
Hospital D	Private	300	January, 2002
Hospital E	Public	500	July, 2002
Hospital F	Public	750	January, 2002
Hospital G	Public	500	January, 2002
Hospital H	Public	800	September, 2001
Hospital I	Public	300	January, 2003

3.4 Definition of Terms

To assist with performing this research study the following definitions are provided for clarification of the terms used in the paper.

3.4.1 Leader Actions and Behaviors: Bass (1985: 26) identifies two distinct styles of leadership: transformational and transactional. Each dimension has a corresponding set of actions and behaviors. Four transformational behaviors

(Denison, Hooijberg and Quinn, 1995: 526-540; Quinn, et al., 2003: 15-20) have been identified as reflective of the transformational role. They are the 1) facilitator role, 2) mentor role, 3) innovator role, and 4) broker role. They also have identified four actions and behaviors associated with transactional leadership. Transactional roles include the 1) monitor role, 2) coordinator role, 3) producer role, and 4) director role.

3.4.2 Transformational Leadership: Transformational leadership is based in the personal values, beliefs, and qualities of the leader rather than process between leaders and followers. Transformational leadership has the ability to lead changes in the organization's vision, strategy, and culture as well as promote innovation in products (Daft, 1999: 427).

3.4.3 Transactional Leadership: The transactional leader is an exchange process between leaders and followers. The transactional leader recognizes specific follower's desires and provides goods that meet those desires in exchange for followers meeting specified objectives or performing certain duties (Daft, 1999: 427).

3.4.4 Learning Organization: Garvin (1993: 80) provides this working definition of a learning organization: "an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights." According to Bennett and O'Brien (1994: 41-49), the learning organization attributes are eight key factors that influence a company's ability to learn and change. The eight attributes are as follows:

1) Shared vision/strategy. An organization and its members must have a vision of where they want to go so that they can anticipate what they need to learn to get there. They must develop a broad strategy for reaching their goal so that they know if their learning is moving the organization toward their vision.

2) Organization/job structure. An organization's structure can support continuous learning by allowing for fluid job descriptions that respond to the changing demands of the external environment, as well as to the needs of the organization itself.

3) Information flow and communication. Learning-oriented companies use advanced technology to obtain and distribute information. Information should be easily accessible and widely distributed throughout the organization.

4) Work processes. Work processes enhance the learning organization; they should incorporate systematic problem-solving techniques, allow for experimentation and new approaches, encourage learning from sharing with others and promote a systematic view of the organization.

5) Performance goals and feedback. To build an organization that uses learning as a tool to achieve customers' needs, performance goals and a performance-appraisal system must incorporate the needs of customers. Thus, feedback is critical to employees' learning and improvement.

6) Training and education. Structured training and education efforts play a key role in transforming an organization's practices. In a learning organization, the variety of training and education includes formal training programs, individual development-planning tools, and action-reflection learning (or simply action learning).

7) Rewards and recognition. The final building block supports all of the others. Reward-and-recognition systems must support and encourage individuals and organizational learning.

8) Individual and team development. Learning organizations seek ways to encourage their employees to develop individually, but at the same time, they promote the development of entire teams.

3.4.5 Knowledge system: The process within an organization to maintain or improve performance is based on experience. The organizational learning process is characterized as *knowledge acquisition*, which includes the development or creation of skills, insights, and relationships; *knowledge dissemination*, which includes the dissemination of what has been learned; and *knowledge utilization,* which refers to the integration of learning so it is broadly available and can be used in new situations (DiBella, Nevis and Gould, 1995: 74).

3.4.6 Organizational Culture: The culture of a group can be formally defined as "a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems" (Schein, 1992: 12).

3.4.7 Organizational Culture Orientation: Types of organizational culture that fall into four culture orientations were developed specifically by Harrison and Stroke (1992: 14-22). These are 1) achievement-oriented culture, 2) support-oriented culture, 3) power-oriented culture, and 4) role-oriented culture. Each of the four cultural orientations defines a set of core values, assumptions, interpretations, and approaches that characterize organizations. The purpose of the four culture orientations is to diagnose and facilitate the social process of change in an organization.

3.5 Operational Definitions

3.5.1 Independent Variables

Leadership behaviors as an independent variable are composed of two main behaviors of leaders: transformational and transactional leadership behavior.

3.5.1.1 Transformational leadership behavior is the first exogenous variable operationalized through four roles of leadership behavior. These are facilitator role, mentor role, innovator role, and broker role.

1) The facilitator role reflects the values of the human relations model, and is operationalized as the expectations of an administrator to foster collective effort, build cohesion and teamwork, and manage inter-personal conflict.

2) The mentor role reflects the values of human relations, and is operationalized as the expectations of an administrator to understand self and others communicate effectively and develop employees.

3) The innovator role reflects the values of open system theory, and is operationalized as the expectations of an administrator to facilitate adaptation and change, think creatively, and manage change.

4) The broker role also reflects the values of open system theory, and is operationalized as the expectations of an administrator to build and maintain a power base, negotiate agreement and commitment, and present ideas.

3.5.1.2 Transactional leadership behavior is the second part of the first exogenous variable operationalized through four roles of leadership behavior. These are producer role, director role, coordinator role, and monitor role.

1) The producer role, reflects the values of the rational goal model, and is operationalized as the expectations of an administrator to work productively, foster a productive work environment, and manage time and stress.

2) The director role also reflects the values of the rational goal model, and is operationalized as the expectations of an administrator to clarify expectations through the processes, be a decisive initiator who defines problems, selects alternatives, establishes objectives, defines roles and tasks, generates rules and policies, and gives instructions and orders.

3) The coordinator role reflects the values of the internal process model, and is operationalized as the expectations of an administrator to maintain the structure and flow of the system, facilitate work, and manage across functions.

4) The monitor role reflects the values of the internal process model, and is operationalized as the expectations of an administrator to monitor individual performance, manage collective performance and process, and analyze information with critical thinking.

3.5.1.3 Current organizational culture is considered as a second independent variable and consists of four main types of current organizational culture. Thus, organizational culture is operationalised through four main types of current organizational culture. These are achievement-oriented culture, supportive-oriented culture, role-oriented culture, and power-oriented culture.

1) An achievement-oriented culture consists of beliefs, values, work styles, and relationships of people in an organization, and is operationalized as a

particular climate or feel of organizational member's perception, wherein people are oriented to pursuit of common goals, and make their contribution freely in response to their enthusiasm and commitment to a shared purposed. In addition, they rely on high motivation to overcome problems.

2) A supportive-oriented culture reflects beliefs, values, work styles, and relationships of people in an organization. The people's beliefs are based on mutual trust between the individual and the organization, belief in human beings, and a preference to help each other. This organizational culture type offers its members satisfaction that comes from relationships of mutuality, belonging, and connections.

3) A role-oriented culture is operationalized as a particular climate or feel of organizational member's perception, which orients them to perform specific functions in order to receive defined rewards, and to expect to adhere to rules and regulations. The values of the role-oriented culture are order, dependability, rationality, and consistency.

4) A power-oriented culture is operationalized as a particular climate or feel of organizational member's perception, wherein the people are motivated by rewards and punishment and by the wish to be associated with a strong leader who has ability and a willingness to administer rewards and punishments. Values in this type utilize resources to satisfy or frustrate the needs of others and to control other's behavior.

3.5.2 Dependent Variable

3.5.2.1 Learning organization is a dependent variable in this research study. It is divided into four main attributes of a learning organization; each main attribute also consists of sub-attributes. Four main attributes of a learning organization are: 1) shared vision/mission and strategy, 2) job structure and system, 3) knowledge system, and 4) performance and development.

1) Shared vision/mission and organizational strategy in learning organization is a compelling one that inspires people to act. An organization must have a clear vision, mission and organizational strategy to ensure that its

members-managers and employees-know the direction in which their learning efforts need to focused.

2) Job structure and system is composed of four sub-attributes of learning organization as follows:

(1) Organizational and job structure can be operationally defined as follows: the characteristics of jobs in an organization are self-directed, project-centered, team-based, and cross-functional work teams, through which they must support the systematic view of the organization.

(2) Individual and team practices is operationalized as organizational members continually seeking to learn and grow individually, to share what they have learned with others throughout the organization, and to analyze mistakes in order to learn how to do it better the next time.

(3) Information flow and communication is operationalized as follows: the system in an organization supports the continuous flow and communication of information to employees by integrating the use of advanced information technology, enhancing communication with one other, and sharing information across organization boundaries.

(4) Work processes are operationalized through incorporation of systematic problem-solving techniques, and allowances for experimentation and new approaches; it also encourages learning from and sharing with others, and promotes a systematic view of the organization.

3) Knowledge system is defined as knowledge acquisition, dissemination, and utilization, in which organizational members seek information from the internal and external organization, share these skills and knowledge resources with each other, and use formal and informal groups for transferring knowledge to the entire organization. Thus, all knowledge received is translated into new ways of behaving for organizational members.

4) Performance and development is composed of four sub-attributes of a learning organization as follows:

(1) Performance goals and feedback is operationally defined as systematic methods to measure the improvement in employees'

performance goals and a reliable customer feedback system which provides information about customers' satisfaction.

(2) Training and education is operationally defined as formal and informal programs helping organizational members learn from their own and other experiences. These programs provide opportunities for organizational members to learn new skills and information related to their jobs, and are carried out systematically at all levels.

(3) Rewards and recognition is operationally defined as a system wherein organizational members are recognized and rewarded for continuous learning and change, taking risks, developing themselves and others, taking the time to show appreciation for individual effort, and meeting challenges.

(4) Individual and team development is operationally defined as an environment in which members of the organization continually grow and develop through on-the-job learning opportunities.

3.6 Instruments

The purpose of this study was to measure the effect of leadership behaviors and organizational culture on learning organizations in private and public accredited hospitals. Three instruments were used for collecting the data. The first was an instrument called "Diagnosing Organizational Culture" designed by Harrison and Strokes (1992). Permission was obtained to utilize this instrument. The second instrument was devoted to the development and refinement of an instrument called The Learning Organization Practices Inventory based on the concept of Bennett and O'Brien (1994). The third instrument was the development of an instrument measuring transactional and transformational leadership, based on the concept of Quinn, et al. (2003). The three instruments required approximately 40 minutes to complete.

3.6.1 Organizational Culture Diagnostic Instrument

3.6.1.1 Description and Content

The Organizational Culture diagnostic assessment instrument, presented in Table 3.2, was designed by Harrison and Strokes (1992) to assist organizational members in identifying the shared values and systems of belief that create and sustain the existing culture of the organization. Participants were asked to provide information regarding employee relationships, stated values versus values in action, motivation, and the use of power in the organization. The instrument provided a written feedback report designed to assist the organization in developing and implementing strategies for desired future organizational culture change. The final report of the scores for the Organizational Culture diagnosis defined the four types of "existing" and "preferred" measures of organizational culture as: (a) Power-Oriented, (b) Role-Oriented, (c) Achievement-Oriented, and (d) Support-Oriented. Each of these cultures has an effect on organizational decision-making, the responsibility of leadership, reward systems, member treatment, and responsiveness of the organization toward its internal and external environment. A summary of the content of the Organizational Culture Diagnostic instrument is found in Appendix A. The Organizational Culture Diagnostic instrument has been used in several studies in the area of organizational culture and evidence of validity and reliability exist. Although no reliability of this instrument is published in the instrument's manual book, Harrison and Strokes (1992) stated that high "face validity" was reported by participants, in that people "feel" the scores reflect their experience of the organizational culture. Thus, the reliability of this instrument in this research study is shown in Table 3.5.

3.6.1.2 Scoring

The Organizational Culture diagnostic assessment is a self-scoring, forced choice, two column, 15-item questionnaire that measures the existing versus the preferred state of an organizational culture. The left column was labeled "Existing Culture" and the right column is labeled "Preferred Culture". Each question provides the respondent with the "beginning" of a sentence followed by four possible "endings" that are examples of the way in which an organization may function or be

designed. Respondents are asked to form a complete sentence by combining the beginning of each sentence with one of the endings for the existing organizational culture while also ranking each response from four to one. Each one of the four alternatives represents one of four distinct forms of organizational culture.

A four indicates the ending which best describes the way in which the organization functions. A three and a two indicate the responses that next best describe the way in which the organizational functions. A one describes the way in which the organization functions the least. Respondents were then asked to repeat the same process of ranking for The "Preferred" organizational culture. A ranking of four indicates the ideal organizational state, or the way in which members of the organization most desire the organization to function. A ranking of three and two describe the responses that identify the next best ways in which the organization could function. A one describes the least desirable or least preferred way in which the organization would function.

Table 3.2 Number of Items for Diagnosing Organizational Culture Instrument

Scale	Items	Number of questions
Power-oriented culture	1 A -15A	15
Role-oriented culture	1 B – 15 B	15
Achievement-oriented culture	1 C – 15 C	15
Supportive-oriented culture	1 D – 15 D	15
		Total number of questions is 60

3.6.1.3 Interpreting

The total possible points for the entire instrument are fixed at 300, so the higher the score on one scale, the lower the scores will be on the other scales. Therefore, the culture-Index scores are a useful way to summarize all four scales. By adding the achievement and support scores and subtracting those from the power and role scales, a score is obtained that reflects the general level of empowerment, trust, and cooperation within the organization (Harrison and Strokes, 1992: 23).

3.6.2 Transactional and Transformational Leadership (TTL)

3.6.2.1 Description and Content

The transactional and transformational Leadership instrument was developed based on the concept of Competing Values Framework proposed by Quinn, et al. (2003) and Belasen, et al. (1996: 87-117). This questionnaire was used to measure the leadership roles and their associated competencies, which are important for effective managerial leadership. The instrument created two parallel survey instruments, Transformational and Transactional Leadership (other) and Transformational and Transactional Leadership (self), to measure how leaders use roles. The leadership behaviors and actions were classified into the two leadership roles, transformational and transactional leadership, within each of four quadrants as follows:

1) Transformational Leadership

(1) The first, the upper-right quadrant, was composed of two leadership roles: (a) innovator role; and (b) broker role (See Table 3.3). This quadrant represents the effectiveness framework that links to open-systems theory and the process of adaptation to the external environment of the organization.

(2) The second, the upper-left quadrant, was also composed of two leadership roles: (a) facilitator role, and (b) mentor role (See Table 3.3). This quadrant is described as the human relations quadrant, placing primary emphasis on human interaction and process.

2) Transactional Leadership

(1) The third, the lower-right quadrant, was composed of two leadership roles: (a) producer role; (b) director role (See Table 3.3). This quadrant was described as the rational goal model. These roles emphasized the rational pursuit of goals external to the group, and the leader's role in defining and motivating the attainment of those goals.

(2) The fourth, the lower-left quadrant, was composed of two leadership roles: (a) monitor role; (b) coordinator role (See Table 3.3). This quadrant represented the effectiveness framework as the internal process model and places primary emphasis on internal control and stability.

3.6.2.2 Scoring

The transactional and transformational leadership instrument asked respondents to describe leadership roles and their competencies by indicating how often each of 46 items was true of their behavior through the use of a five point Likert-Scale. This instrument had scores on each item, which range from one to five points, depending on the strength of agreement with the item.

The anchors used are as follows:

1 = Not at all

2 = Once in a while

3 = Sometimes

4 = Fairly Often

5 = Frequently, if not always

The 46 items were divided into two major leadership behaviors, in which each leadership behavior represents two roles of each quadrant. The total numbers of leadership roles in this instrument are eight roles within the four quadrants. as shown in Table 3.3.

Table 3.3 Number of Items of Leadership Behavior Instrument

Scale	Items	Number of questions
Transformational Leadership		
Right-upper quadrant		
• Innovator Role	20-28	9
• Broker Role	29-34	6
Left-upper quadrant		
• Mentor Role	1-6	6
• Facilitator Role	7-13	7
Transactional Leadership		
Right-lower quadrant		
• Producer Role	35-37	3
• Director Role	38-40, 14, 16, 19	6
Left-lower quadrant		
• Monitor Role	43-46	4
• Coordinator Role	41-42, 15, 17, 18	5
		Total of items is 46

The transactional and transformational leadership instrument scale scores are average scores for the item on the scale. The numerical value is assigned to the respondent's answer for each role. The score can be derived from summing the items and dividing the number of items that make up the role. The outcome variables are then assigned values of 1 to 5, and each outcome variable is summed and divided by the number of items.

3.6.3 The Learning Organization Practices Inventory (LOPI)

3.6.3.1 Description and content

The learning organization practice inventory (LOPI), presented in Table 3.4, is a 60-item paper and pencil instrument designed to assess an organization's capacity to transform into a learning organization. Respondents were asked to examine 10 subsystems of the organization that affect learning at the organizational level. Each subsystem has a different number of questions as shown in Table 3.4. The respondents were then asked to evaluate current organizational

practices describing the capacity of the organization to transform into a learning organization. The subsystems that were measured included: (a) Building shared vision and organizational strategy; (b) Organizational and Job Structure; (c) Information Flow and Communication; (d) Individual and Team Practices; (e) Work Process; (f) Knowledge Acquisition, Dissemination, and Utilization; (g) Performance Goals and Feedback; (h) Training and Education; (i) Rewards and Recognition; (j) Individual and Team Development. Although no reliability was reported for this instrument, it was measured during pilot testing to establish reliability. This is reported in Chapter Four.

3.6.3.2 Scoring

The Learning Organization Practice Inventory (LOPI) asked respondents to describe the capacity of the organization to transform into a learning organization by indicating through the use of a five point Likert-Scale how often each of the 60 items was true of the organization. This instrument has scores on each item, which range from one to five points depending on the strength of agreement with the item. The anchors used were as follows:

Rating Scale for Learning Organization Practice Inventory Items:

1 = Least

2 = Little

3 = Moderate

4 = Much

5 = Very much

Table 3.4 The Learning Organization Practices Inventory Factors and Dimensions

Factors	Subsystems	Items	Number of questions
Vision and strategy	• Building shared vision and organizational strategy	1-8	8
Job Structure and System	• Organizational and job structure • Information flow and communication • Work process • Individual and team practice	9-13 14-19 20-24 25-30	5 6 5 6
Knowledge System	• Knowledge acquisition, dissemination, and utilization	31-37	7
Performance and Development	• Performance goals and feedback • Training and education • Rewards and recognition • Individual and team Development	38-42 43-47 48-52 53-57	5 5 5 5
			Total of item is 57

The Learning Organization Practice Inventory instrument scale scores are average scores for the item on the scale. The numerical value is assigned to the respondent's answer for each factor. The numerical values are summed and divided by the number of items for the factor. The outcome variables are assigned values of 0 to 4, and the each outcome variable is summed and divided by the number of items.

3.6.4 Content and Face Validity

For the purpose of this particular study, the validity of the instrument was determined by the content-related and face-related evidence. Content validity is the degree to which an instrument measures an intended content area and is basically judgmental of the representativeness of the items on the instrument. Face validity is related to whether the instrument is suitable for the intended audience (Babbie, 1995: 127-128).

For this research study, the three instruments utilized for investigation were: (1) The Organizational Culture Diagnostic instrument; (2) The Transactional and

Transformational Leadership instrument; and (3) The Learning Organization Practices Inventory. The three instruments were written in the English language. In order to utilize this instrument measuring effectiveness in Thai health care organizations, it was necessary to translate the instrument from the English version to the Thai version. Thus, constructed content and face validity of (1) The Organizational Culture Diagnostic instrument; (2) The Transactional and Transformational Leadership instrument; and (3) The Learning Organization Practices Inventory (Thai Version) were supported by two groups of experts.

Constructed content validity was established by a panel of academic advisory researchers committee (n=3) from the School of Public Administration of The National Institution Development Administration, and the Excellence Center of The Bangkok General Hospital. The panel of experts was chosen based on their familiarity with the knowledge of research theory and statistical procedures, knowledge of concepts of leadership, management, learning organizations and organizational culture, and management and administrative experience with the population being surveyed.

To establish face validity, a field test was conducted after the panel of experts review. A three-member panel of experts was chosen based on their familiarity with Thai Culture and Language, education, and research.

The expert panel was composed of:

1) Associate Professor Dr. Wipah Chanawangsa
2) Dr. Nanthaphan Chinlumprasert
3) Dr. Somboon Daunsamosorn

The panel of experts was requested to evaluate (1) The Organizational Culture Diagnostic instrument; (2) The Transactional and Transformational Leadership instrument; and (3) The Learning Organization Practices Inventory (Thai version) in the following ways: (a) clarity of language of the questions with the Thai language; (b) comprehensibility of the questionnaire; and (c) clarity of the instructions on the questionnaire. They also determined if it was necessary to improve the clarity of language of the questions to prevent any problems that might be experienced when completing the questionnaire.

Prior to mailing these three instruments to the panel of experts, each potential member was contacted to explain their role in the instrument development and to ascertain their willingness to participate. All who were contacted agreed to participate. Each panel member was then mailed an informational packet for review, which included: (a) a cover letter explaining the purpose of the three instruments, affirmation of their expertise, and an invitation to serve as a expert panel member; (b) a copy of the three instruments, both English version and Thai version, and (c) a self-addressed stamped envelope to use for returning the three instruments with their comments.

The next phase in construct content and face validity of the three instruments was to revise the instrument based on the suggestions from the two groups of experts.

3.6.5 Reliability testing

After a review of the internal validity and expert evaluation of the scale items for each instrument, a pilot study of the survey questionnaires and analysis procedures was conducted. The primary purpose of the pilot testing was to determine the reliability of measurement instruments and to identify potential problems that might occur during the formal data collection phase.

The pilot study used one separate sample. The pilot study consisted of individuals who were hospital directors, heads of medical and nursing departments, nursing supervisors and heads of wards, as well as those who are their immediate subordinates for both clinical staffs and non-clinical staffs in medium sized community hospitals (100 beds). This sample was selected on the basis of experience with quality improvement programs, namely Hospital Accreditation, as well as the hospital director's willingness to participate in this study.

Accuracy of research instruments was comprised of two fundamental components: validity, and reliability. Validity refers to how accurately the instrument measures the underlying phenomenon of interest. The reliability of a measurement instrument concerns whether it produces identical results in repeated applications. The basis for determining the reliability of a measurement tools is separating the two types of variability that comprise an individual's obtained score. These two types of variation are true variation and error (Kerlinger, 1992: 413-414). True variation is the

result of differences between respondents or contexts that are being measured. This form of variation is attributed to the operation of the experimental treatment. Error variation represents the incursion of extraneous influences on the score derived from the measurement instrument. The effect of error is to mask and distort the nature of the individual's true score contained within data obtained by the measurement.

There are a number of means to evaluate the reliability of a measurement instrument reported in the literature. Babbie (1995: 125-126) explained that these methods include the test-retest method, alternative-form method, split-halves method, and the internal consistency method. The test-retest and alternative-form method are referred to as double test because of their use of multiple administrations of the measurement. According to the limited number of pilot sites that participated in quality improvement such as Hospital Accreditation, double approaches were not applicable for the current study. Thus, the internal consistency method, specifically Cronbach's Alpha, was selected to measure the reliability of the survey instrument since it requires only a single administration of the test. It also provides a measure that is equivalent to the average of all possible split-half reliabilities for a given instrument.

An item analysis was conducted on all three questionnaires to determine the measure of internal consistency or Cronbach's Alpha measure. The result of this analysis is shown on Table 3.5.

Table 3.5 Reliability of Instruments

Instrument	Cronbach's Coefficient Alpha
Organizational Culture Diagnostic Instrument	
Power-Oriented	.93
Role-Oriented	.70
Achievement-Oriented	.76
Support-Oriented.	.84
Transactional and Transformational Leadership	
Transformational Leadership	
Innovator Role	.93
Broker Role	.83
Mentor Role	.91
Facilitator Role	.93
Transactional Leadership	
Producer Role	.87
Director Role	.81
Monitor Role	.79
Coordinator Role	.85
The Learning Organization Practices Inventory	
Building shared vision and Organizational strategy	.83
Organizational and job structure	.78
Information flow and communication	.85
Individual and team practice	.79
Work process	.92
Knowledge System	.87
Performance goals and feedback	.85
Training and education	.91
Rewards and recognition	.91
Individual and team development	.79

3.7 Data Collection

3.7.1 Quantitative Method

Data collection and questionnaire distribution was conducted by the researcher on site in the hospital facilities. The researcher distributed the packets to the three classifications of hospital staff: (1) hospital director, medical and nursing director as a high level of administration; (2) head of medical department, nursing supervisor or nursing manager as a middle level of administration; and (3) heads of wards, and their immediate subordinates as hospital staff.

Survey questionnaire packets contained the three instruments and an additional page of demographic information (See Appendix A). The hospital directors, medical and nursing directors, heads of medical departments, and nursing supervisors or nursing managers used the Transactional and Transformational Leadership Instrument Leader Form to evaluate their leadership. The immediate subordinates used the Transactional and Transformational Leadership Instrument Rater Form to evaluate their direct superior's leadership behaviors and actions to measure an effective managerial leadership role in an organization. Both the middle level of administration and hospital staff used the Organizational Culture Diagnostic instrument to describe the organizational culture of their hospital facility. In addition, all survey participants used the Learning Organization Practices Inventory to measure the capacity of the hospital facility to transform into a learning organization.

Respondents were asked to complete and return questionnaires within two weeks of receipt. Participants were assured anonymity and confidentiality. The sample participation was completely voluntary in this study. The protection of the subject's interest and well-being with respect to anonymity and confidentiality of data in this study was addressed in the content of the cover letter and the data collection processes. The choice to participate was exercised by returning the completed questionnaires. In addition, the decision to withdraw from the study was permitted without any negative consequences to the study participants.

Each survey packet was marked for each level of respondent. The returned questionnaires were coded so that the participant level within the organization was known.

The following describes the details of the various packets.

Packet for high level administration:

1) Cover letter outlining the purpose of the study, the sample, issues of anonymity, confidentiality of the data, and the opportunity to ask questions about the study process.

2) The Transactional and Transformational Leadership Instrument for self-reporting.

3) The Learning Organization Practices Inventory.

4) Demographic data collection instrument.

5) Thank you letter for participation in the study.

Packet for middle level administration:

1) Cover letter outlining the purpose of the study, the sample, issues of anonymity, confidentiality of the data, and the opportunity to ask questions about the study process.

2) The Organizational Culture Diagnostic instrument.

3) The Transactional and Transformational Leadership Instrument for self-reporting and other-reporting.

4) The Learning Organization Practices Inventory.

5) Demographic data collection instrument.

6) Thank you letter for participation in the study.

Packet for Immediate Subordinates of middle level administration:

1) Cover letter outlining the purpose of the study, the sample, issues of anonymity, confidentiality of the data, and the opportunity to ask questions about the study process.

2) The Organizational Culture Diagnostic instrument.

3) The Transactional and Transformational Leadership Instrument for reporting other's leadership behavior

4) The Learning Organization Practices Inventory.

5) Demographic data collection instrument.

6) Thank you letter for participation in the study.

3.7.2 Qualitative Method

As previously mentioned, this research study applied qualitative techniques by interviewing and using personal contact for primary data collection. In order for enhanced analysis and interpretation of data from quantitative methods, the second step in data collection was to conduct in-depth interviews with hospital chief executives. A standardized open-end format was used to gather qualitative information (See Appendix C: Interview Guide Line). This standardized open-ended interview format was utilized to ascertain how organizational culture variables affect the development of learning organizations in hospitals with Hospital Accreditation.

3.7.3 Interviewing Process

The goal of this qualitative method was to determine the perceptions and experiences of those involved in the development of a learning organization through quality improvement by using the guideline of quality improvement of Hospital Accreditation. Thus, the semi-structured interviews were conducted with eight of the nine hospital chief executives in both public and private hospitals. One executive declined to participate in the semi-structured interview.

In the semi-structured interviews, the interviewees were given pertinent information about the study, ensured anonymity, and given an explanation of what will and will not be done with the data obtained in the interview. The interviews with each hospital chief executive were recorded with prior permission from the subjects using an audio recording device. Each interview lasted between 40-50 minutes. The researcher transcribed all interview data verbatim.

3.8 Data Analysis

The statistical package for social science (SPSS version 10) and LISREL for windows was used for the computational analysis in this study. Each of the variables in these hypotheses was measured by the perception of organizational members. The sample was described by use of inferential and descriptive summary statistics for the means, standard deviations, and percentages.

3.8.1 Path Analysis

Path analysis is a form of applied multiple regression analysis that uses path diagrams to guide problem conceptualization or test complex hypotheses. Through its use one can calculate the direct and indirect influences of independent variables on a dependent variable. These influences are reflected in so-called path coefficients, which are actually standardized regression coefficients (beta: β). Moreover, one can test different path models for congruence with observed data. While path analysis has been and is an important analytic and heuristic method, it is doubtful that it will continue to be used to help test models for their congruence with obtained data. Rather, its value will be as a heuristic method to aid conceptualization and the formation of complex hypotheses (Kerlinger, 1992: 564).

3.8.2 Structural Equation Modeling (SEM)

Structural equation modeling (or sometimes called covariance structure analysis) includes various modeling methods that explain linear (or sometimes nonlinear) relationships among variables by analyzing correlations or covariances among them. SEM provides estimates of the strength of the relationships between variables. Each of the relationships is expressed in a kind of equation called structural equation. Thus, structural models express the dependent relationship between the variables. The relationship between the constructs is often assumed as a causal relationship.

One of the most important characteristics of SEMs is that they can analyze the independent relationships of more than one set of variables. For example, one SEM can encompass several linear regression equations, which are not related to each other. Because of this nature, SEM can deal with a very complex relationship between variables, which usually requires, say, several multiple regression equations to be more fully described. SEM is a very flexible design and researchers can easily describe their theoretical or hypothetical models as a SEM. Thus, researchers can develop more complex and situationally oriented models with which they can confirm and explain their theories or hypotheses. The model can be developed exclusively based on the researcher's insight. SEM is fundamentally employed for verifying

hypothesized models and this is why SEM is mentioned as a confirmatory method rather than exploratory.

Although it deals with measured relationships between variables, SEM is not only a means of prediction. Since SEM expresses the relationship of variables in one model, SEM can equip itself with predictive power. In addition, SEM can deal with sets of independent variable relationships simultaneously and consequently it is not confounded by multicollinearity among the variables. Considering the fact that the variables handled in real social science research situation are often highly correlated, SEM seems to be an effective tool for those who study a complex sociocultural phenomenon (Bollen, 1989: 32-39).

Consequently, the second hypothesis model for testing shown in Figure 3.1 was investigated through structural equation modeling. Therefore, dimensions of transactional and transformational leadership were exogenous variables in the path model. In other words, there were no variables hypothesized to influence them. Conditions for organizational culture and the learning organization were also exogenous variables because they had at least one hypothesized cause in the path model. The one directional model, known as a recursive model, assisted in establishing causal links between the variables.

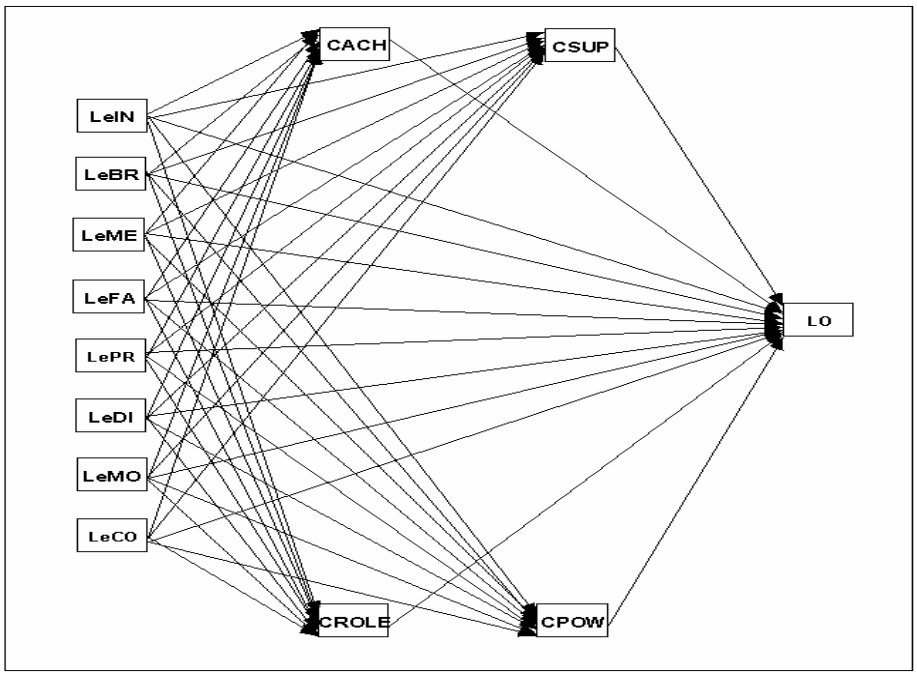

Figure 3.1 Hypothesized Model of Learning Organization for Testing Hypothesis Two

LeFA = Facilitator role LeME = Mentor role

LeIN = Innovator role LeBR = Broker role

LePR = Producer role LeDI = Director role

LeMO = Monitor role LeCO = Coordinator role

CACH = Achievement-oriented culture CSUP = Supportive-oriented culture

CPOW= Power –oriented culture CROLE = Role –oriented culture

LO = Learning organization composed of four attributes namely vision, mission, and strategy, b) Job Structure and system, c) Knowledge system, and d) Performance goals and individual and team development

3.8.3 Research Questions and Hypotheses.

This section lists the research questions and related hypotheses for the study. In addition, it was explained how the questions and hypotheses were to be statistically tested as follows:

Research question # 1: What is the relationship between leadership behaviors perceived by administrators of private and public hospitals certified & accredited by HAT and the learning organization and each of its attributes?

Hypothesis one for administrator's perception is as follows:

H1: Leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators are significantly related to the overall learning organization. This hypothesis is sub-divided into four sub- hypotheses as follows:

H1.1: Leadership behaviors as perceived by administrators are significantly related to vision / mission and organizational strategies.

H.1.2: Leadership behaviors as perceived by administrators are significantly related to organizational and job structure.

H1.3: Leadership behaviors as perceived by administrators are significantly related to knowledge system.

H1.4: Leadership behaviors as perceived by administrators are significantly related to performance goal and individual / team development.

To study the magnitude of the relationship of transactional and transformational leadership to the learning organization, stepwise regression was employed just as it was used to determine the relationship between leadership behaviors as perceived by the administrator level on the learning organization and each of its attributes. Regression was used to examine the first hypothesis. It should be noted that when each stepwise procedure is executed, the predictor variable that has the highest simple correlation with the dependent variable enters the equation first. The procedure terminates when all variable are entered or when there are no more predictor variables available that make a statistically significant contribution to the regression. The prerequisites of this test are (a) that the independent variables are at the interval scale, and (b) that the dependent variable was measured at the interval scale (Suchart Prasith-rathsint, 1997: 109-112). This test proved suitable for the analysis in which it was used because both of these prerequisites were fulfilled.

Research question # 2: To what extent did the leadership behaviors directly affect the development of a learning organization and indirectly affect the development of a learning organization via a current organizational culture as

perceived by subordinates in both private and public hospitals certified and accredited by HAT?

Hypothesis two for subordinate's perception are as follows:

H2.1: The development of a learning organization is directly affected by leadership behaviors.

H2.2: The development of a learning organization is directly affected by a current organizational culture (achievement, support, role, and power–oriented culture).

H2.3: A current organizational is directly affected by leadership behaviors.

Structural equation modeling (path analysis) employing LISREL program for windows was used to investigate Hypotheses 2.1 and 2.2. To determine the effect of the leadership behaviors and organizational culture on the learning organization both in private and government hospitals, standardized regression coefficients were calculated (Bollen, 1989: 38).

3.9 Conclusion

This chapter described the quantitative and qualitative methodology for gathering data for the study of the role of transformational and transactional leadership behavior, type of organizational culture and attributes of a learning organization. Two survey instruments employed in the study were the transactional and transformational leadership instrument (TTLI) and the learning organization practice inventory (LOPI), a long-standing instrument developed by the researcher for use in health care organization with Hospital Accreditation with commendation. Another survey instrument is the Organizational Culture Diagnostic instrument (OCDI), developed by Harrison and Strokes (1992) and employed, with permission, for this study.

The survey instrument was mailed to high level administrators, middle level administrators and first level administrators and their immediate subordinates of each of nine certified accredited hospital. The results of the pilot study supported the validity of the instrument. The pilot study also helped determine strengths and

weakness of the proposed methodology. Examination of the variables revealed a reasonable distribution, adequate response levels, and acceptable reliability alphas. An analysis of data, which is documented in Chapter 4, was utilized to provide answers to the two research questions.

CHAPTER 4

FINDINGS

This chapter presents the findings obtained after the data were analyzed using stepwise multiple regression and path analysis. First, participants who were sent the questionnaires are described. Second, demographic frequencies and descriptive statistics are presented to provide a profile of the participants and hospitals. Finally, analyses, which address hypotheses one through four, are presented and explained.

4.1 Demographic Frequencies

The mailing consisted of 800 surveys, which were sent to three levels of employees, namely chief executives, middle level of administration, and their subordinates who worked in hospitals that were willing to participate. At the end of ten weeks, the total number of surveys returned was 550. The overall return rate for the study was 68.65 % with a 61.78% usable return rate. The number of returned questionnaires with usable data was 495 from both private and public hospitals. The response rate from private hospitals was 47.9 percent, while 52.1 percent came from public hospitals as illustrated in Table 4.1.

Table 4.1 Number of Participants

Sector	Chief Executive (n= 30)		Middle Level Administrator (n = 114)		Subordinate (n = 351)	
	N	%	N	%	N	%
Private Hospital	15	46.2	57	50	168	47.9
Public Hospital	15	53.8	57	50	183	52.1

4.1.1 Demographic Information

The sample, as presented in Table 4.2, revealed that the majority, 40.7 percent was in the 31-40 age group. An additional 28.7 percent were between 41 and 50 years of age, while 17.7 percent were in the 21 to 30 group. The remaining 12.6 percent were over 50. The level of education was diverse with 71.90 percent reporting a Bachelor's degree, 19.41 percent a Master's degree, and 2.77 percent with a doctorate degree. An additional 5.36 percent reported qualifications other than a degree (technical certificate, etc.).

With regard to work experience, 67.83 percent of the sample have over (10) ten years, 11.46 percent have between one and three years and 10.35 percent between seven and ten years. As for position, 5.54 percent of the sample were hospital directors, assistant hospital directors, and members of the committee of hospital administration classified as chief executive. An additional 23.47 percent were medical department heads, and nursing managers or supervisors who considered their primary role as middle level of administration. The remaining 70.97 percent were classified as clinicians or practitioners.

With regard to job category, the respondents were primarily from full-time nurses (74.12%). An additional 11.09 percent of the respondents were physicians, while the remainder (14.02%) worked in various specialist or technical areas (dentist, occupational therapist, etc.).

4.1.2 Participation in Hospital Accreditation

As shown on Table 4.3, 28.6% percent reported to be the team leaders in a quality improvement team while 65.5 percent reported to be members of the quality improvement team. As well, 17.2 percent were involved in a management team as the leader while 72.4 percent were responsible as members of a facilitative team.

Table 4.2 Demographic Characteristics

Characteristic	Chief executives (n = 30)		Middle Administrator (n = 114)		Subordinates (n = 351)		Total (n = 495)	
	N	%	N	%	N	%	N	%
Age								
-21-30	-	-	5	3.9	91	23.7	96	17.7
-31-40	3	10.0	37	29.1	180	46.9	220	40.7
-41-50	10	33.3	51	40.2	94	24.5	155	28.7
-> 50	17	56.7	33	26.0	18	4.7	68	12.6
Education								
-Bachelor's-	12	40.0	76	59.8	301	78.4	389	71.9
Master's	10	33.3	32	25.2	63	16.4	105	19.4
-Doctorate	5	16.7	7	5.5	3	0.8	15	2.8
-Others	2	6.7	11	8.7	16	4.2	29	5.4
Number of Years Worked in Hospital								
-1-3	-	-	7	5.5	54	14.1	62	11.5
-4-6	1	3.3	10	7.9	39	10.2	49	9.1
-7-10	2	6.7	6	4.7	48	12.5	56	10.4
-> 10	27	90.0	102	80.3	238	62.0	367	67.8
Job Category								
-Physician	17	66.7	28	24.6	15	4.3	60	11.09
-Pharmacist	-	-	4	3.5	16	4.5	20	3.69
-Dentist	-	-	3	2.6	5	1.4	8	1.47
-Nurse	8	30.0	69	60.5	332	94.5	401	74.12
-Occupational Therapist	-	-	2	1.7	3	.85	5	.92
-Technician (X-Ray)	-	-	4	3.5	12	3.4	16	2.95
-Technician (Laboratory)	1	3.3	4	3.5	24	6.8	27	4.99

Table 4.3 Employee's Role in Participation in HA

Functional Responsibility In HA	Role in Participation in HA					
	Management Team (n = 221)		Facilitative Team (n = 233)		Quality Improvement Team (n = 374)	
	N	%	N	%	N	%
Team Leader	38	17.2	37	15.9	107	28.6
Member	160	72.4	177	76.0	245	65.5

4.2 Descriptive Statistics

4.2.1 Self-Rated Leadership Behaviors of Chief Executives

The sample produced mean score values and standard deviations for the chief executive self-rated transformational and transactional leadership behaviors in both private and public hospitals are shown in Table 4.4. The self-rated transformational leadership variable means of the chief executives of private hospitals are innovator role 4.08, broker role 4.07, mentor role 4.55, and facilitator role 4.37. For the public hospitals, the self-rated transformational leadership variable means of the chief executives are innovator role 4.57, broker role 4.23, mentor role 4.62, and facilitator role 4.57. Interestingly, the mean for mentor role is the highest self-reported mean score of both private and public chief executive hospitals. In both private and public hospital, the chief executives perceive that they display these transformational leadership behaviors between fairly often and frequently.

In the self-rating of transactional leadership, the sample mean value of producer role (4.44) is higher for the chief executives of private hospitals than director role (4.34), coordinator role (4.15), and monitor role (4.13) respectively. For the public hospitals, the sample mean value is also higher for the producer role (4.58) than director role (4.42), monitor role (4.41) and coordinator role (4.36) respectively. The mean for producer role is the highest self reported mean score of both private and public chief executive hospitals. They perceive that they display these transactional

leadership behaviors between fairly often and frequently. Interestingly enough, the self-reported perceptions indicated the chief executives of both private and public hospitals spend about an equal amount of effort in both transactional and transformational roles.

Table 4.4 Mean Self-Rated Leadership Behaviors of Chief Executive

Leadership Behavior Role	Private Hospital (n = 15)		Public Hospital (n = 15)		Total (n = 30)	
	X	SD	X	SD	X	SD
Transformational Leadership						
1. Facilitative Role	4.37	.49	4.57	.38	4.30	.52
2. Mentor Role	4.55	.39	4.62	.39	4.18	.52
3. Innovator Role	4.08	.55	4.57	.33	4.54	.40
4. Broker Role	4.07	.52	4.23	.58	4.44	.39
Transactional Leadership						
1. Monitor Role	4.13	.47	4.41	.52	4.27	.51
2. Coordinator Role	4.15	.52	4.36	.45	4.25	.49
3. Producer Role	4.44	.49	4.58	.38	4.49	.44
4. Director Role	4.34	.34	4.42	.35	4.38	.34

4.2.2 Perceived Leadership Behaviors by Subordinates

The means and standard deviations for each transformational and transactional leadership behavior of the chief executives as perceived by their immediate subordinates for both private and public hospital are shown in Table 4.5, 4.6, and 4.7 respectively. Investigation of the mean scores of both public and private hospitals indicates that the transformational and transactional leadership variables are lower than the self-rated mean values for chief executives. These results show that their subordinates perceive chief executive display these behaviors less frequently than chief executives perceive themselves in that role.

According to Table 4.5, private hospital's middle administrators perceived that their chief executives perform the broker role most often with a mean value of 3.91, which is higher than the facilitator, innovator, and mentor roles with mean values of 3.89, 3.86, and 3.74 respectively. They also perceived their chief executives perform the producer role more frequently with a mean value of 4.00, which is higher than

monitor, director, and coordinator with mean values of 3.89, 3.86, and 3.74 respectively. Thus, private hospitals' middle administrators perceived that their chief executives displayed the producer role most, while they displayed the coordinator role least.

Regarding public hospitals, the middle administrators perceived their chief executive performing the facilitator and mentor roles more often with mean values of 3.66, which is higher than innovator and broker roles with mean values of 3.65 and 3.45 respectively. They also perceived their chief executive performing the producer role most frequently with a mean value of 3.69, which is higher than mentor, director, coordinator role with mean values of 3.63, 3.63, and 3.58 respectively. Thus, public-hospitals' middle administrators perceived that their chief executives played the producer role most, while they displayed the innovator role least.

Table 4.5 Mean Perceived Leadership Behaviors by Middle Administrators

Leadership Behavior Role	Private Hospital (n = 56)		Government Hospital (n =58)		Total (n = 114)	
	X	SD	X	SD	X	SD
Transformational Leadership						
1. Facilitator Role	3.89	.70	3.66	.69	3.77	.70
2. Mentor Role	3.74	.67	3.66	.55	3.70	.61
3. Innovator Role	3.86	.76	3.49	.76	3.65	.77
4. Broker Role	3.91	.70	3.65	.69	3.78	.71
Transactional Leadership						
1. Monitor Role	3.94	.67	3.63	.71	3.78	.71
2. Coordinator Role	3.82	.75	3.58	.69	3.70	.73
3. Producer Role	4.00	.70	3.69	.76	3.84	.74
4. Director Role	3.88	.69	3.63	.63	3.75	.67

Private Hospitals' subordinates perceived that their chief executive performed the facilitator role with a mean value of 3.67, as shown on Table 4.6. This is higher than mentor, broker, and innovator with mean values of 3.62, 3.54, and 3.52 respectively. They also perceived their chief executive performing the monitor role most often with a mean value of 3.76, which is higher than producer, director, and

coordinator with mean values of 3.75, 3.65, and 3.61 respectively. Thus, private-hospital subordinates perceived that their chief executives displayed the monitor role most, while they displayed the innovator role least.

Regarding public hospitals, subordinates saw their chief executives performing the facilitator role most often with a mean value of 3.69, which is higher than broker, mentor, and innovator role with mean values of 3.61, 3.55, and 3.46 respectively. They also perceived their chief executive performing the monitor role most frequently with a mean value of 3.70. This is higher than producer, director, or coordinator roles with mean values of 3.67, 3.59, and 3.57 respectively. Thus, public hospitals' subordinates perceived that their chief executives played the monitor role most, while they displayed the innovator role least. This is the same result as shown with the private hospitals.

Table 4.6 Mean Perceived Leadership Behaviors by Subordinates

Leadership Behavior Role	Private Hospital (n = 112)		Government Hospital (n = 233)		Total (n = 345)	
	X	SD	X	SD	X	SD
Transformational Leadership						
1. Facilitator Role	3.67	.72	3.69	.72	3.69	.72
2. Mentor Role	3.62	.64	3.55	.67	3.57	.66
3. Innovator Role	3.52	.72	3.46	.74	3.48	.73
4. Broker Role	3.54	.72	3.61	.73	3.58	.73
Transactional Leadership						
1. Monitor Role	3.76	.70	3.70	.74	3.70	.75
2. Coordinator Role	3.61	.75	3.57	.81	3.61	.73
3. Producer Role	3.75	.70	3.67	.77	3.71	.73
4. Director Role	3.65	.72	3.59	.77	3.62	.69

According to Table 4.7, private hospitals' middle administrators and subordinates perceived their chief executive performing the facilitator role most often with a mean value of 3.74, which is higher than mentor, broker, and innovator with mean values of 3.66, 3.66, and 3.61 respectively. They also perceived their chief executives performing the producer role most frequently with a mean value of 3.83, which is higher than monitor, director, and coordinator with mean values of 3.83, 3.71, and 3.68 respectively. Thus, the combined perceptions of private hospitals'

middle administrators and subordinates indicated that their chief executives displayed the producer role most, while they displayed the innovator role least.

Regarding public hospitals, the combined perceptions of hospitals' middle administrators and subordinates indicate their chief executives performing the facilitator role most often with a mean value of 3.69, which is higher than broker, mentor, and innovator role with mean values of 3.62, 3.57, and 3.46 respectively. They also perceived their chief executive performing the producer role more with a mean value of 3.70, which is higher than monitor, director, coordinator role with mean values of 3.67, 3.61, and 3.60 respectively. Thus, the combined perceptions of hospitals' middle administrators and subordinates indicate that their chief executives played the producer role most, while they displayed innovator role least. In sum, the perceptions toward managerial roles of leadership behavior in both private and public hospitals are relatively similar to each other. The middle administrators and subordinates perceived that all eight roles of leadership behavior might be seen to be displayed between sometimes and fairly often when dealing with organizational management.

Table 4.7 Mean Perceived Leadership Behaviors by both Middle Administrator Level and Subordinates

Leadership Behavior Role	Private Hospital (n = 168)		Government Hospital (n = 291)		Total (n = 459)	
	X	SD	X	SD	X	SD
Transformational Leadership						
1. Facilitator Role	3.74	.72	3.69	.72	3.71	.75
2. Mentor Role	3.66	.65	3.57	.65	3.60	.74
3. Innovator Role	3.61	.74	3.46	.74	3.52	.65
4. Broker Role	3.66	.73	3.62	.73	3.63	.68
Transactional Leadership						
1. Monitor Role	3.81	.70	3.67	.76	3.72	.74
2. Coordinator Role	3.68	.75	3.60	.72	3.63	.73
3. Producer Role	3.83	.71	3.70	.74	3.74	.73
4. Director Role	3.73	.67	3.61	.69	3.65	.69

Table 4.8 presents the mean scores by type for the leadership behaviors. Chief executives for private hospital and public hospitals perceived that the transformational leadership style best described their leader behaviors (means of 4.25 and 4.5). The self-rated transactional leadership was a mean of 4.23 in private hospitals and a mean of 4.44 in public hospitals. In contradiction, their subordinates perception toward to their leader behaviors both in private and public hospital exhibited the transactional leadership as more dominant (mean of 3.78 and 3.65) than the transformational leadership style (means of 3.67 and 3.60). In conclusion, the data from Table 4.8 identified there are discrepancies between the perceptions of chief executives and their subordinates in both private and public hospitals.

Table 4.8 Leadership Behaviors: Mean Score by Type

Leadership Behavior	N	Private Hospital		N	Public Hospital		Total (N= 30)	
		X	SD		X	SD	X	SD
Self-rating								
Transformational Leadership	15	4.27	.42	15	4.50	.33	4.37	.39
Transactional Leadership	15	4.25	.35	15	4.44	.36	4.35	.38
Perception of Subordinates								
Transformational Leadership	177	3.67	.68	302	3.60	.63	3.62	.65
Transactional Leadership	176	3.78	.64	302	3.65	.65	3.70	.67

4.2.3 Perceived Organizational Culture Type By Subordinates

4.2.3.1 Organizational Culture Type- Current Situation

Table 4.9 illustrates the perceived current dominant culture role as perceived by middle administrators and their subordinates from nine hospitals. Respondents from both private and public hospitals reported that role-oriented culture best described their organizational culture (means of 2.90 and 2.78 respectively). Within the private hospitals, the power-oriented culture (mean of 2.68) and the achievement-oriented culture (mean of 2.65) were the second and third most

descriptive of respondents' organizational culture, and the supportive-oriented culture (mean of 2.38) was the least descriptive of their organizational culture. For public hospitals, the achievement-oriented culture (mean of 2.71) and the support-oriented culture (mean of 2.63) were the second and third most descriptive of respondents' organizational culture, and the power-oriented culture (mean of 2.55) was the least descriptive of their organizational culture.

Table 4.9 Diagnosing Organizational Culture as Perceived by Subordinates (Current Culture)

Organizational Culture Role	Private Hospital (n = 166)		Public Hospital (n = 273)		Total (n = 439)	
	X	SD	X	SD	X	SD
Achievement-Oriented Role	2.65	.46	2.71	.45	2.68	.45
Supportive-Oriented Role	2.38	.58	2.63	.58	2.53	.59
Power-Oriented Role	2.68	.55	2.55	.59	2.60	.58
Role-Oriented Role	2.90	.37	2.78	.40	2.82	.39

Table 4.10 demonstrates the perceived preferred dominant culture role as perceived by middle administrators and their subordinates from nine hospitals. Their perception of organizational culture had a similarity of preference. Respondents from both private and public hospitals reported that achievement-oriented culture best described their preferred organizational culture (mean of 3.26 and 3.25 respectively). The support-oriented culture (mean of 3.21 and 3.25 respectively) and the role-oriented culture (mean of 2.91 and 2.90 respectively) were the second and third most descriptive of respondents' preferred organizational culture, and the power-oriented culture (mean of 2.11 and 2.16 respectively) was the least descriptive of their preferred organizational culture for both private and public hospitals.

Table 4.10 Diagnosing Organizational Culture as Perceived by Subordinates (Preferred Culture)

Organizational Culture Role	Private Hospital (n = 162)		Public Hospital (n = 265)		Total (n = 427)	
	X	SD	X	SD	X	SD
Achievement-Oriented Role	3.26	.41	3.25	.50	3.26	.47
Supportive-Oriented Role	3.21	.54	3.25	.58	3.24	.57
Power-Oriented Role	2.11	.69	2.16	.72	2.14	.71
Role-Oriented Role	2.91	.47	2.90	.47	2.90	.47

4.2.4 Learning Organization Practice Inventory

An analysis of the extent to which there is a learning organization as perceived by hospital employees is presented in Table 4.11. A summated means score on a five-point, Likert-type scale pertaining to the 57 items of the Learning Organization Practice Inventory (LOPI) instrument (Part IV of the questionnaire) was computed by use of mean scores and standard deviation. The mean scores with values higher or lower are representative of a positive or negative belief that the nine hospitals accredited and certified by HAT represent an organization which holds the core characteristics of a learning organization in the four dimensions of the learning organization practice inventory.

Table 4.11 illustrates the highest mean score expressed by hospital's employees' perception in each of the dimensions of the learning organization practice inventory. For the private sector, the highest mean score exhibited by their employees was in shared vision/mission & organizational strategy with a mean score of 3.76, while the lowest mean score recorded was in the knowledge system with a mean score of 3.45. For the public sector, the highest mean score exhibited by their employees was in shared vision/mission & organizational strategy with a mean score of 3.82, while the lowest mean score recorded was in the job structure & organizational system with a mean score of 3.55. However, Hospital employees of private hospitals report an overall mean score similar to the public hospital mean scores as shown in Table 4.12.

Table 4.11 Highest Mean Score on the Learning Organization Practice Inventory

Learning Organization Dimension	Private Hospital		Public Hospital		Total	
	X	SD	X	SD	X	SD
Vision, Mission and Strategy	3.76	.47	3.82	.57	3.80	.54
Job Structure and Systems	3.56	.49	3.55	.55	3.56	.53
Knowledge System	3.45	.54	3.58	.56	3.53	.56
Performance and Development	3.59	.50	3.59	.56	3.59	.54

Table 4.12 The Overall Mean Score on the Learning Organization Practice Inventory

Level of Learning Organization	N	Private Hospital		N	Public Hospital		Total N	Total	
		X	SD		X	SD		X	SD
Learning organization	183	3.63	.45	307	3.67	.52	490	3.65	.50

4.3 Hypotheses Tests Results

The two research questions to be tested were presented in Chapter III. Stepwise multiple regression analysis was used to test Hypothesis one and significance was measured at the .05 level. The remaining Hypotheses two to four were tested by path analysis by using LISREL for windows.

4.3.1 Research Question # 1: What is the relationship between leadership behaviors as perceived by administrators of private and public hospitals certified and

accredited by HAT and the existence of a learning organization and each of its attributes?

To answer this research question, hypothesis one testing showed leadership behaviors as perceived by chief executives are significantly related to the overall learning organization and each of its attributes: a) vision / mission and organizational strategies, b) organizational and job structure, c) knowledge system, and d) performance goal and individual / team development.

4.3.1.1 Hypothesis 1 stated that leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators are significantly related to the overall learning organization. To answer this hypothesis, stepwise multiple regression was used to determine the regression coefficients. The results are reported in Table 4.13. Of the eight roles of leadership behavior, only one behavior was significant, that is, the producer role of transactional leadership. It was entered into the equation first and produced a simple correlation of .457. It accounted for 20% of the variance in learning organization and was statistically significant (F =7.401, P = .011) However, no other single variable had significance at $p < .05$ level, forcing the stepwise analysis technique to terminate. Therefore, research hypothesis one was supported by the data. There was only one leadership behavior subscale (producer role) that was more predictive of a learning organization than were the other leadership behavior subscales.

Table 4.13 Summary of Analysis of Variance for Leadership Behavior Subscales and Overall Learning Organization

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	1.243	1	1.243	7.401	.011*
Residual	4.701	28	.168		
Total	5.944	29			

a. Predictors: (constant): Producer Role
b. Dependent Variable: Overall Learning Organization, $R^2 = .20$

Table 4.14 Stepwise Regression Outcomes with Overall Learning Organization as the Dependent Variable and Dimensions of Leadership Behaviors as Independent Variables

Variable	B	SE B	Beta	t	p-value
Transactional Leadership;	.467	.172	.457	2.720	.011
Producer Role	1.856	.775		2.393	.024
(Constant)					

N = 30, p < .05*

4.3.1.2 Hypothesis 1.1 stated that leadership behaviors as perceived by administrators are significantly related to vision / mission and organizational strategies. Table 4.15 and 4.16 are a summary of the stepwise multiple regression that was conducted using the individual perception as the unit of analysis. Regarding the eight roles of leadership behavior, only one behavior was significant, that is, producer role of transactional leadership. It was entered into the equation first and produced a simple correlation of .506. It accounted for 20% of the variance in learning organization and was statistically significant (F =6.907, P = .014) However, no other single variable had significance at p < .05 level, forcing the stepwise analysis technique to terminate. Therefore, research hypothesis 1.1 was supported by the data. There was only one leadership behavior subscale (producer role) that was more predictive of a learning organization than the other leadership behavior subscales.

Table 4.15 Summary of Analysis of Variance for Leadership Behavior Subscales and Vision / Mission and Organizational Strategy of Learning Organization

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	1.496	1	1.496	6.907	.014*
Residual	6.062	8	.217		
Total	7.558	29			

a. Predictors: (constant): Producer Role
b. Dependent Variable: vision / mission and organizational strategy of Learning Organization, $R^2 = .20$

Table 4.16 Stepwise Regression Outcomes with Vision / Mission and Organizational Strategy of Learning Organization as the Dependent Variable and Dimensions of Leadership Behaviors as Independent Variables

Variable	B	SE B	Beta	t	p-value
Transactional Leadership ;	.410	.065	.506	6.264	.000
Producer Role	2.022	.271		7.459	.000
(Constant)					

N = 30, P* < .05

4.3.1.3 Hypothesis 1.2 stated that leadership behaviors as perceived by administrators are significantly related to organizational and job structure. Table 4.17 and 4.18 are a summary of the stepwise multiple regression that was conducted using the individual perception as the unit of analysis. Regarding the eight roles of leadership behavior, only one behavior was significant, that is, producer role of transactional leadership. It was entered into the equation first and produced a simple correlation of .50. It accounted for 25% of the variance in a learning organization and was statistically significant (F =9.279, P = .005) However, no other single variable had significance at p < .05 level, forcing the stepwise analysis technique to terminate. Therefore, research hypothesis 1.2 was supported by the data. There was only one leadership behavior subscale (producer role) that was more predictive of a learning organization than the other leadership behavior subscales.

Table 4.17 Summary of Analysis of Variance for Leadership Behavior Subscales and Organization and Job Structure of Learning Organization

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	1.605	1	1.605	9.279	.005*
Residual	4.845	28	.173		
Total	6.450	29			

a. Predictors: (constant): Producer Role
b. Dependent Variable: Organization and Job Structure of Learning Organization, $R^2 = .25$

Table 4.18 Stepwise Regression Outcomes with Organization and Job Structure of Learning Organization as the Dependent Variable and Dimensions of Leadership Behaviors as Independent Variables

Variable	B	SE B	Beta	t	p-value
Transactional Leadership ;	.531	.174	.50	3.046	.005**
Producer Role	1.506	.787		1.913	.066*
(Constant)					

N = 30, P* < .05

4.3.1.4 Hypothesis 1.3 stated that Leadership behaviors as perceived by administrators are significantly related to the knowledge system. Table 4.19 and 4.20 are a summary of the stepwise multiple regression that was conducted using the individual perception as the unit of analysis. Of the eight roles of leadership behavior, only one behavior was significant, that is, the producer role of transactional leadership. It was entered into the equation first and produced a simple correlation of .54. It accounted for 29% of the variance in a learning organization and was statistically significant (F =11.841, P = .002) However, no other single variable had significance at p < .05 level, forcing the stepwise analysis technique to terminate. Therefore, research hypothesis 1.3 was supported by the data. There was only one

leadership behavior subscale (producer role) that was more predictive of a learning organization than the other leadership behavior subscales.

Table 4.19 Summary of Analysis of Variance for Leadership Behavior Subscales and Knowledge System of Learning Organization

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	2.322	1	2.322	11.841	.002**
Residual	5.491	28	.196		
Total	7.813	29			

a. Predictors: (constant): Producer Role
b. Dependent Variable: Knowledge System of Learning Organization,
$R^2 = .29$

Table 4.20 Stepwise Regression Outcomes with Knowledge System of Learning Organization as the Dependent Variable and Dimensions of Leadership Behaviors as Independent Variables

Variable	B	SE B	Beta	t	p-value
Transactional Leadership ;	.639	.186	.50	3.441	.002
Producer Role	.933	.838		1.113	.275
(Constant)					

N = 30, P* < .05

4.3.1.5 Hypothesis 1.4 stated that leadership behaviors as perceived by administrators are significantly related to performance goal and individual / team development. Table 4.21 and 4.22 are a summary of the stepwise multiple regression that was conducted using the individual perceptions as the unit of analysis. With regard to the eight roles of leadership behavior, only one behavior was significant, that is, the producer role of transactional leadership. It was entered into the equation first and produced a simple correlation of .47. It accounted for 22% of the variance in a learning organization and was statistically significant (F =8.062, P = .008) However,

no other single variable had significant at $p < .05$ level, forcing the stepwise analysis technique to terminate. Therefore, research hypothesis 1.4 was supported by the data. There was only one leadership behavior subscale (producer role) that was more predictive of the learning organization than the other leadership behavior subscales.

Table 4.21 Summary of Analysis of Variance for Leadership Behavior Subscales and Performance Goal / Feedback and Individual and Team Development of Learning Organization

Model	Sum of Squares	df	Mean Square	F	p-value
Regression	1.670	1	1.670	8.062	.008**
Residual	5.801	28	.207		
Total	7.471	29			

a. Predictors: (constant): Producer Role
b. Dependent Variable: Performance Goal / Feedback and Individual and Team Development of Learning Organization, $R^2 = .22$

Table 4.22 Stepwise Regression Outcomes with Performance Goal / Feedback and Individual and Team Development of Learning Organization as the Dependent Variable and Dimensions of Leadership Behaviors as Independent Variables

Variable	B	SE B	Beta	t	p-value
Transactional Leadership ;	.542	.191	.473	2.839	.008
Producer Role	1.497	.861		1.738	.093
(Constant)					

N = 30, P* < .05

4.3.2 Research Question # 2: To what extent did the leadership behaviors directly affect the development of a learning organization and indirectly affect the development of a learning organization via a current organizational culture as

perceived by subordinates in both private and public hospitals certified and accredited by HAT?

To answer Research question # 2, the sub-hypothesis 2.1, 2.2, and 2.3 as perceived by subordinates in both private and public hospitals were tested to answer research question two about the direct effect of leadership behaviors on the development of a learning organization and the indirect effect on the development of a learning organization via a current organizational culture as perceived by subordinates. The sub-hypotheses are as follows:

H2.1: The learning organization is directly affected by leadership behaviors.

H2.2: The learning organization is directly affected by a current organizational culture (achievement, support, role, and power– oriented culture).

H2.3: A current organizational culture is directly affected by leadership behaviors.

The structural path models presented in Figure 3.1 hypothesize that the leadership behaviors directly affect the learning organization, leadership behaviors directly affect a current organizational culture, and a current organizational culture directly affects the learning organization. as perceived by subordinates. Structural equation modeling was performed in LISREL to evaluate Hypotheses 2.1, 2.2, and 2.3, the result of which provides a description of the situation in private and public hospitals respectively.

4.3.2.1 Hypothesis Model of Private Hospitals

The structural path models presented in Figure 4.1 hypothesize that leadership behaviors, as perceived by subordinates, directly affect the development of a learning organization and indirectly affect the development of a learning organization via a current organizational culture. A structural equation model was performed with LISREL to evaluate Hypothesis 2.1, 2.2, and 2.3. Figure 4.1 displays the path model, which resulted from analysis of a linear structural equation.

According to Hypothesis 2.1, the result of the analysis for the path model showed that there are four leadership behavior roles that directly affected the development of a learning organization at statistically significant p-values of <.05 level. Furthermore, it was found that four leadership behavior roles had no significant

direct effect on the learning organization at statistically significant p-values of <.05 level. The result findings are presented into two parts as follows:

First, the result findings with statistically significant p-values of < .05 level are:

1) The learning organization was positively directly influenced by transactional leadership behaviors (the director role) with a beta-coefficient of .56.

2) The learning organization was positively directly influenced by transformational leadership behaviors, specifically the broker role with beta-coefficients of .29.

3) The learning organization was negatively directly influenced by transactional leadership behaviors, namely the producer role, with a beta-coefficient of -.19.

4) The learning organization was negatively directly influenced by transactional leadership behaviors, namely the monitor role, with a beta-coefficient of -.21.

Second, the result findings with no statistical significance p-value of .05 level are:

1) The learning organization was not directly influenced by transformational behaviors, namely the facilitator role, and the mentor role.

2) The learning organization was no directly influenced by transformational behaviors, namely the innovator role, and the coordinator role.

In conclusion, Hypothesis 2.1 is partially supported by the data.

To answer Hypothesis 2.2 in private hospitals, it was found that there are two types of a perceived current organizational culture that directly affected the learning organization at statistically significant p-values of < .05 level. Furthermore, it was found that no significant effect of two types of a perceived current organizational culture directly influenced on the learning organization at statistical significance p-value of .05 level. The result findings are presented into two parts as follows:

First, the result findings with statistical significance p-value of < .05 level are:

1) The learning organization was positively directly influenced

by a current organizational culture (supportive-oriented culture) with a beta-coefficient of .28.

2) The learning organization was positively directly influenced by a current organizational culture (role-oriented culture) with a beta-coefficient of .17.

Second, the result findings with no statistically significant p-values are as follows:

1) The learning organization was not directly influenced by a current organizational culture (achievement-oriented culture).

2) The learning organization was not directly influenced by a current organizational culture (power-oriented culture).

In conclusion, Hypothesis 2.2 is partially supported by the data.

To answer Hypothesis 2.3 in private hospitals, it was found that there are two types of a perceived current organizational culture that were directly affected by two leadership behavior roles at statistically significant p-values of greater than a .05 level. Furthermore, it was found that two types of a perceived current organizational culture no significant direct effect on the learning organization at statistically significant p-values of .05 level or greater. The result findings are presented into two parts as follows:

First, the result findings with statistical significance p-value of greater than .05 level are:

1) The perceived current organizational culture (achievement-oriented culture) was positively directly influenced by transactional leadership behavior (the coordinator role) with a beta-coefficient of .53.

2) The perceived current organizational culture (achievement-oriented culture) was negatively directly influenced by transactional leadership behavior (the producer role) with a beta-coefficient of -.21.

Second, the result findings with no statistically significant p-value are as follows:

1) The perceived current organizational culture (achievement, supportive, role, and power-oriented culture) was not directly influenced by transformational leadership behavior (the facilitator role, the mentor role, the

innovator role, and broker role) as well as transactional leadership behavior (the director role and the monitor role).

2) The perceived current organizational culture (supportive, role, and power-oriented culture) was not directly influenced by transactional leadership behavior (the producer role and the coordinator role).

In order to find the answer for research question # 2, we can conclude from sub-hypothesis 2.1, 2.2, and 2.3 that the model of path analysis in private hospital exhibits the interrelated three major variables (covariance). Therefore, the results of the path analysis indicate that the development of a learning organization was directly and indirectly positively affected by both transformational and transactional leadership behaviors and three roles of a current organizational culture at statistically significant p-values of greater than .05 level.

Overall, all the hypothesized paths are statistically significant, supporting the hypotheses related to the structural equations. Hypothesis 2, therefore, is partially supported by the data.

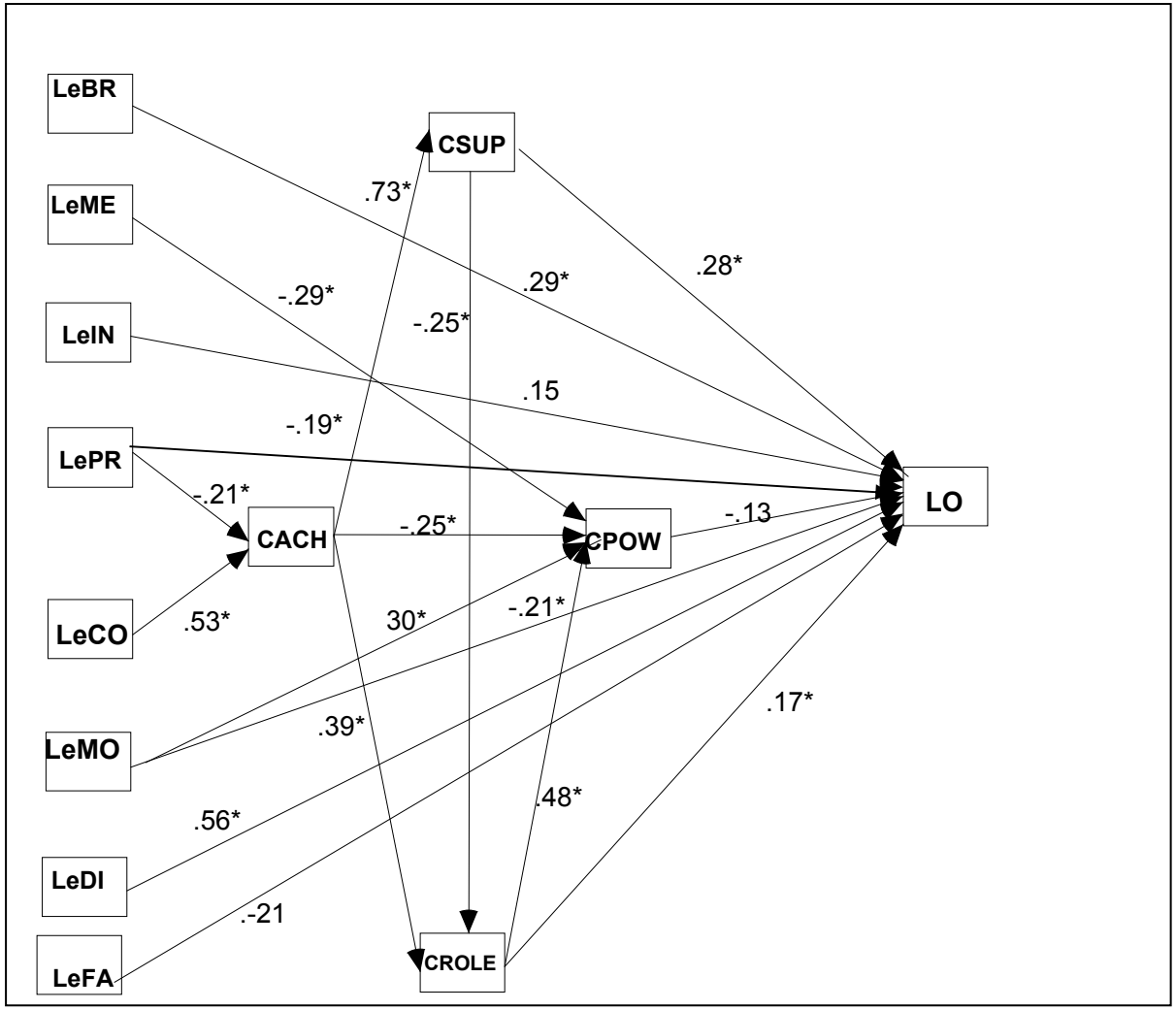

Figure 4.1 Theoretical Model of Learning Organization for Testing Hypothesis Two to Four: Private Hospital
* P < .05

The researcher employed LISREL to analyze the data because it considers measurement errors, gives parameter estimates based on the maximum likelihood method, and provides various indices of the extent to which the proposed covariance structural model fits the data. In this study, the researcher used nine indices to assess the goodness of fit of the covariance structural mode: (a) chi-square value and its *p* value, and chi-square divided by the degrees of freedom, (b) normed fit index (NIF), (c) non-normed fit index (NNIF), (d) incremental fit index (IFI), (e) root mean square error of approximation (RMSEA), (f) root mean square residual (RMR), (g) standard root mean square residual (SRMR), and (h) critical N.

The learning organization model of private hospitals was assessed using multiple goodness-of-fit indices in order to indicate the hypothesized model fit in the theoretical model. The good-fit-indices shown in Table 4.23 has a high value greater than .90, which makes the model marginally accepted. The goodness-of-fit measures showed Chi-Square is 36.91 with 32 degrees of freedom making the probability value for the Chi-square greater than .05. The Normal Fit Index (NFI) is .99, while a NFI greater than .090 is desirable. A goodness of fit index (GFI) is .97 and AGFI is .92, in which the good model fit is indicated by GFI and AGFI values that are close to one. For the others, indexes determined a desirable value greater than 0.90; all indexes in this specified group are acceptable with a desirable value less than 0.05. All indexes in this specified group are also acceptable with less than 0.04. The critical number is greater than 200 cases.

Table 4.23 Goodness of Fit Statistics: Private Hospitals

Index	Criteria Level	Goodness Of Fit Statistics
Chi-square	P > 05	Chi-Square = 36.96 df =32, p .32
Goodness of fit index	≥ 0.90	GFI = 0.97
Adjusted goodness of fit index	≥ 0.90	AGFI = 0.92
Normed fit index	≥ 0.90	NFI = 0.99
Non-normed fit index	≥ 0.90	NNFI = 1.00
Incremental fit index	≥ 0.90	IFI = 1.00
Root mean square error of approximation	≤ 0.05	RMSEA = 0.024
Root mean square residual	≤ 0.05	RMR = 0.0091
Standard root mean square residual	≤ 0.05	SRMR = 0.022
Critical N	≥ 200	CN = 274.54

Table 4.24 illustrates the Standardized direct effect, indirect effect and total effect estimation of Linear Structural Relationship Equation Model at a statistically significant p-value < .05 level. According to Table 4.24, the research study found transformational leadership behavior, with the facilitator role considered as an independent variable, has a negative direct effect on a learning organization with a total effect of β = -.28. This table shows that the negative direct effect of transactional leadership behavior with producer and monitor role as independent variables have total effects on the learning organization of β = -.26 and β = -.23 respectively. However, it was found that the highest direct effect of transactional leadership behavior on the learning organization was the director role which has a total effect of β = .56.

Next, the second highest direct effect on the learning organization was the broker role (transformational) and the coordinator role (transactional) which have total effects of β = .29 and β = .14 respectively. Furthermore, the direct effect of the mentor role within a power-oriented culture was β = -.29, while the direct effect of producer role within an achievement and supportive-oriented culture was β = -.21 and -.15 respectively. It was also found that the coordinator role has the highest total effect of β = .53 within an achievement-oriented culture. The second highest of total

effect of coordinator role was in a supportive and role-oriented culture at .39 and .11 respectively.

According to Table 4.24, the research study found the current organizational culture with achievement, supportive, and role-oriented cultures has total effects on the learning organization with beta-coefficients of .26, .25, and .17 respectively. This table also represented the effects estimation of a current organizational culture on the other current organizational cultures. It was found that achievement-oriented culture has total effects on supportive and role-oriented cultures with beta-coefficient of .73 and .21 respectively. Role-oriented culture has a positive direct effect on power-oriented culture with a total effect of $\beta = .48$. Finally, a supportive-oriented culture has a negative direct effect on role and power-oriented cultures with total effect of $\beta = -.25$ and -.12 respectively.

Table 4.24 shows Demonstrated Square Multiple Correlation Coefficients, the observed variables, composed of four organizational culture settings, and denotes that 18 % of achievement-oriented culture is accounted for by the producer and coordinator roles of leadership behavior, while achievement-oriented culture and producer explain 53 % of supportive-oriented culture and coordinator role. Furthermore, 30 % of power-oriented culture is explained by achievement and role-oriented culture as well as the leaders performing mentor and monitor roles. In addition, the highest R^2 value indicate 42% of learning organization model of private hospitals is accounted by supportive, power and role-oriented culture as well as leadership behaviors exhibiting the broker, producer, monitor, director, and facilitator role at a statistically significant p-value of .05 level or greater.

Table 4.24 Total, Direct and Indirect Effects- Estimation of Leadership Behavior on Organizational Culture and Learning Organization: Private Hospitals

Variables	CACH			CSUP			CROLE			CPOW			LO		
	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE
LeFA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LeME	-	-	-	-	-	-	-	-	-	-.29*	-	-.29*	-	-	-
LeBR	-	-	-	-	-	-	-	-	-	-	-	-	.29*	-	.29*
LeIN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LeDI	-	-	-	-	-	-	-	-	-	-	-	-	.56*	-	.56*
LePR	-.21*	-	-.21*	-	-.15*	-.15*	-	-	-	-	-	-	-.19*	-	-.19*-
LeMO	-	-	-	-	-	-	-	-	-	.16*	-	.16*	-.21*	-.02*	-.23*
LeCO	.53*	-	.53*	-	.39*	.39*	-	.11*	.11*	-	-	-	-	.14*	.14*
CACH	-	-	-	.73*	-	.73*	.39*	-.18*	.21*	-.25*	.10*	-.15*	-	.26*	.26*
CSUP	-	-	-	-	-	-	-.25*	-	-.25*	-.13	-.12*	-.11*	.28*	-.03*	.25*
CROLE	-	-	-	-	-	-	-	-	-	.48*	-	.48*	.17*	-	.17*
CPOW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R^2		.18			.53			.07			.30			.42	

DE = Direct (β), Effect, IE = Indirect Effect (β), TE = Total Effect (β), * p < 05

4.3.2.2 Hypothesis Model of Public Hospitals

The structural path models presented in Figure 4.2 hypothesize that eight roles of leadership behavior and four roles of a current organizational culture would have positive direct and indirect effects on the development of learning organizations in public hospitals. A structural equation model was performed with LISREL to evaluate Hypothesis 2.1, 2.2, and 2.3. Figure 4.2 displays the path model, which resulted from analysis of a linear structural equation.

With regard to Hypothesis 2.1, the result of the analysis for the path model showed that there are three leadership behavior roles that directly affected the learning organization at statistically significant p-values of .05 or greater. Furthermore, it was found that five leadership behavior roles had no significant direct effect on the learning organization. The result findings are presented into two parts as follows:

First, the result findings with statistically significant p-values of <.05 level are:

1) The learning organization was positively directly influenced by transactional leadership behaviors, specifically the producer role with a beta-coefficient of .46.

2) The learning organization was positively directly influenced by transactional leadership behaviors (the director role) with a beta-coefficient of .17.

3) The learning organization was negatively directly influenced by transformational leadership behaviors, namely the broker role, with a beta-coefficient of -.22.

Second, the result findings with no statistical significance are as follows:

1) The learning organization was not directly influenced by transformational behaviors, namely facilitator, mentor, and innovator roles.

2) The learning organization was not directly influenced by transactional behaviors, namely the monitor and coordinator role. In conclusion, Hypothesis 2.1 is partially supported by the data.

To answer Hypothesis 2.2 in public hospitals, it was found that there are four types of perceived current organizational cultures which directly affected the

learning organization at statistically significant p-values of .05 or less. The result findings are presented into two parts as follows:

The result findings with statistically significant p-value < .05 level are:

1) The learning organization was positively directly influenced by a current organizational culture (achievement-oriented culture) with a beta-coefficient of .30.

2) The learning organization was positively directly influenced by a current organizational culture (supportive-oriented culture) with a beta-coefficient of .15.

3) The learning organization was positively directly influenced by a current organizational culture (role-oriented culture) with a beta-coefficient of .11.

4) The learning organization was negatively directly influenced by a current organizational culture (power-oriented culture) with a beta-coefficient of -.13. In conclusion, Hypothesis 2.2 is supported by the data.

To answer Hypothesis 2.3 in public hospitals, it was found that four types of perceived current organizational cultures were directly affected by six leadership behavior roles at statistically significant p-values of greater than .05. Furthermore, it was found that two types of perceived current organizational cultures had no significant direct effect on the learning organization. The result findings are presented into two parts as follows:

First, the result findings with statistical significance p-value of <.05 level are:

1) The perceived current organizational culture (achievement-oriented culture) was positively directly influenced by transactional leadership behavior (the director role) with a beta-coefficient of .31

2) The perceived current organizational culture (role-oriented culture) was positively directly influenced by transactional leadership behavior (the monitor role) with a beta-coefficient of .27.

3) The perceived current organizational culture (achievement-oriented culture) was positively directly influenced by transactional leadership behavior (the coordinator role) with a beta-coefficient of .23.

4) The perceived current organizational culture (achievement-oriented culture) was positively directly influenced by transformational leadership behavior (the mentor role) with a beta-coefficient of .15.

5) The perceived current organizational culture (supportive-oriented culture) was positively directly influenced by transactional leadership behavior (the director role) with a beta-coefficient of .12.

6) The perceived current organizational culture (power-oriented culture) was negatively directly influenced by transformational leadership behavior (the innovator role) with a beta-coefficient of -.15.

7) The perceived current organizational culture (role-oriented culture) was negatively directly influenced by transactional leadership behavior (the director role) with a beta-coefficient of -.19.

8) The perceived current organizational culture (achievement-oriented culture) was negatively directly influenced by transactional leadership behavior (the producer role) with a beta-coefficient of -.34.

Second, the result findings with no statistical significance can be summarized as follows:

1) The perceived current organizational cultures (achievement, supportive, role, and power-oriented culture) were not directly influenced by transformational leadership behaviors, specifically, the facilitator role and broker role.

2) The perceived current organizational cultures (supportive, role, and power-oriented culture) were not directly influenced by transformational leadership behavior (the mentor role) and transactional leadership behavior (the coordinator role).

3) The perceived current organizational cultures (achievement, supportive, and role-oriented culture) were not directly influenced by transformational leadership behavior (the innovator role).

4) The perceived current organizational cultures (achievement, supportive, and power-oriented culture) were not directly influenced by transactional leadership behavior (the monitor role).

5) The perceived current organizational culture (power-oriented culture) was not directly influenced by transactional leadership behavior (the director role).

In order to find the answer for research question # 2, we can conclude from hypothesis 2.1, 2.2, and 2.3 that the model of path analysis in public hospital exhibits the interrelated three major variables (covariance). Therefore, the results of the path analysis indicate that the development of a learning organization was directly and indirectly positively or negatively affected by both transformational and transactional leadership behavior and four roles of a current organizational culture at statistically significant p-values of .05or greater.

Overall, all the hypothesized path are statistically significant, supporting the hypotheses related to the structural equations. Hypothesis 2, therefore, is partially supported by the data.

The researcher employed LISREL to analyze the data because it considers measurement errors, gives parameter estimates based on the maximum likelihood method, and provides various indices of the extent to which the proposed covariance structural model fits the data. In this study, the researcher used nine indices to assess the goodness of fit of the covariance structural mode: (a) chi-square value and its *p* value, and chi-square divided by the degrees of freedom, (b) normed fit index (NIF), (c) non-normed fit index (NNIF), (d) incremental fit index (IFI), (e) root mean square error of approximation (RMSEA), (f) root mean square residual (RMR), (g) standard root mean square residual (SRMR), and (h) critical N.

The criteria of indices mentioned above indicated the good-fit-index shown in Table 4.25 has a high value greater than .90, which makes the model marginally accepted. The goodness-of-fit measures showed Chi-Square = 23.50 with 29 degrees of freedom making the probability value for the Chi-square greater than .05. The Normal Fit Index (NFI) is 1.00, while a NNFI greater than .090 is desirable. A goodness of fit index (GFI) is .99, while AGFI greater than 0.90 is acceptable. For the others, indexes determined a desirable value greater than 0.90; all indexes in this specified group are acceptable with a desirable value less than 0.05. All indexes in this specified group are also acceptable with less than 0.04. The critical number is greater than 200 cases.

Table 4.25 Goodness of Fit Statistics: Public Hospital

Index	Criteria Level	Goodness Of Fit Statistics
Chi-square	P > 05	Chi-Square = 23.50, df = 29, p = .75
Goodness of fit index	≥ 0.90	GFI = 0.99
Adjusted goodness of fit index	≥ 0.90	AGFI = 0.97
Normed fit index	≥ 0.90	NFI = 1.00
Non-normed fit index	≥ 0.90	NNFI = 1.00
Incremental fit index	≥ 0.90	IFI = 1.00
Root mean square error of approximation	≤ 0.05	RMSEA = 0.00
Root mean square residual	≤ 0.05	RMR = 0.0054
Standard root mean square residual	≤ 0.05	SRMR = 0.012
Critical N	≥ 200	CN = 676.32

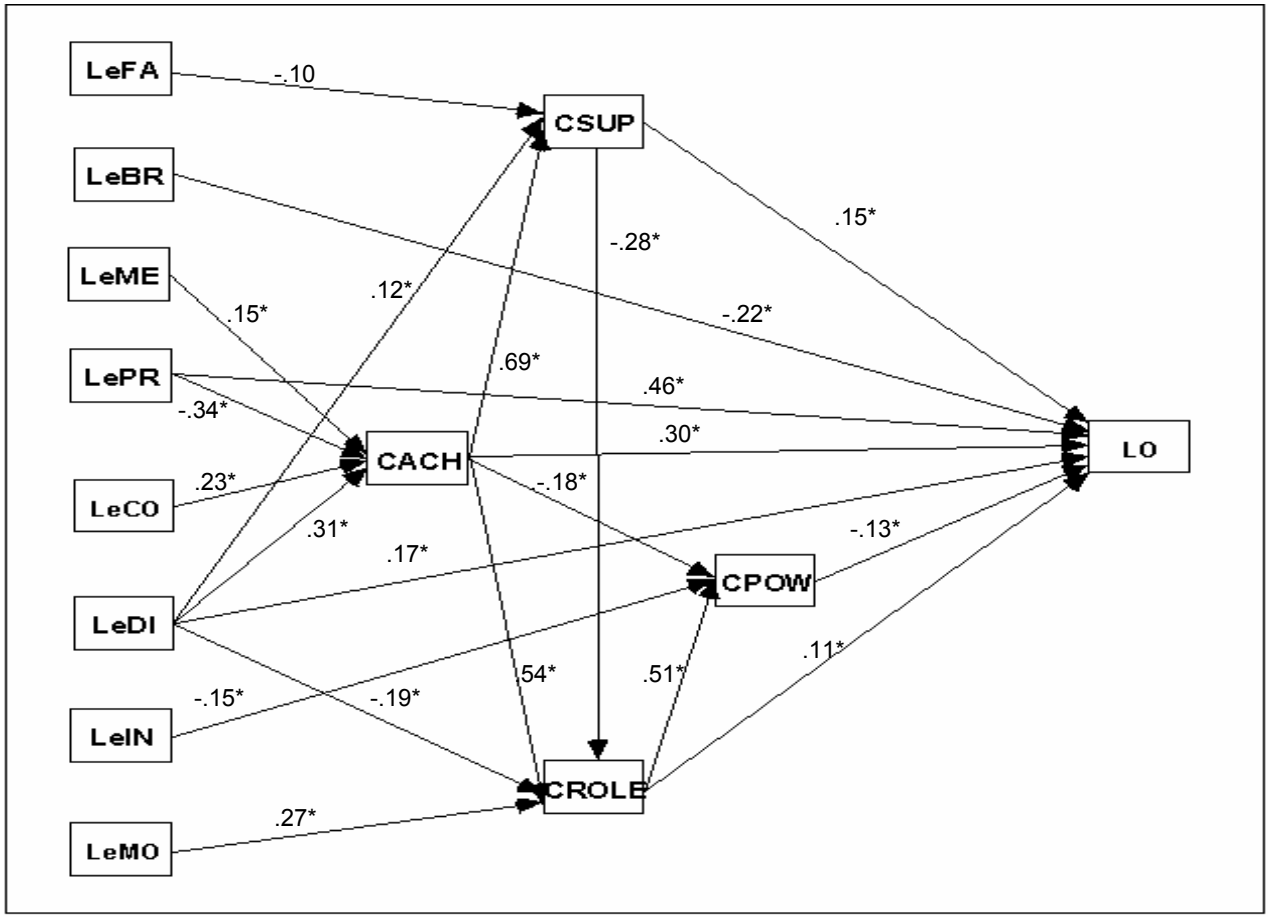

Figure 4. 2 Theoretical Model of Learning Organization for Testing Hypothesis Two: Public Hospital
* $p < .05$

Table 4.26 illustrates the Standardized direct effect, indirect effect and total effect estimation of the Linear Structural Relationship Equation Model at statistical significance of p-value < .05 level or greater. According to Table 4.26, the research study found when transformational leadership behavior-mentor role is considered as an independent variable, it has a positive indirect effect of β = .07 on a learning organization with total effect of β = .07. This table shows that the positive direct and indirect effect of transactional leadership behaviors, namely producer, director, coordinator role on a learning organization is a total effect of β = .32, .31, and .10 respectively. However, it was found that the transformational leadership behavior of broker has a negative direct effect on a learning organization with a total effect of β = -.22. Furthermore, the direct effect of transformational leadership behavior, namely the mentor role, on an achievement-oriented culture has a total effect of β = .15, while the indirect effect of the mentor role on a supportive or role-oriented culture has total effects of β = .10 and .05 respectively. It was also found that the transformational leadership behavior of innovator has a negative direct effect on a power-oriented culture with a total effect of β = -.15. Next, the transactional leadership behavior -coordinator role, has a direct and indirect effect on achievement, supportive and role-oriented cultures with total effects of β = 23, .16, and .08 respectively. The transactional leadership behavior (director role) has direct effects on achievement and supportive-oriented cultures with total effects of β =.31, and .33 respectively. In contrast, the transactional leadership behavior (producer) has a negative direct and indirect effect on achievement, supportive, and role-oriented cultures with total effects of β = -.34, -.23 and -.11 respectively.

With regard to Table 4.26, the research study found the achievement, supportive, and role-oriented cultures have total effects on learning organizations with beta-coefficients of .44, .15, and .04 respectively. On the contrary, the power-oriented culture has a negative total effect on the learning organization with a beta-coefficient of -.13. This table also presented the effects estimation of an organizational culture on another organizational culture. It was found that the achievement-oriented culture has a total effect on supportive, role, and power-oriented cultures with beta-coefficients of .69, .34, and .01 respectively. Role-oriented culture has a positive direct effect on power-oriented culture with a total effect of β = .51.

Finally, a supportive-oriented culture has negative direct effects on role and power-oriented cultures with total effects of β = -.28 and -.14 respectively.

Table 4.26 demonstrates square multiple correlation coefficients, the square multiple correlation coefficient indicates that 50 % of supportive –oriented culture can be accounted by achievement-oriented culture and leadership behavior, specifically the director role, while the beta R^2 value of achievement-oriented culture shows that 18 % is accounted by leadership behavior namely the mentor, producer, coordinator, and director role. Therefore, the R^2 value indicates 49% of learning organization model of public organization is accounted by achievement, supportive, role, and power–oriented culture as well as leadership behaviors using broker, producer, and director role at statistically significant p-values of .05 level or lesser.

Table 4.26 Total, Direct and Indirect Effects- Estimation of Leadership Behavior on Organizational Culture and Learning Organization: Public Hospitals

	CACH			CSUP			CROLE			CPOW			LO		
	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE	DE	IE	TE
FAC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MEN	.15*	-	.15*	-	.10*	.10*	-	.05*	.05*	-	-	-	-	.07*	.07*
BRO	-	-	-	-	-	-	-	-	-	-	-	-	-.22*		-.22*
INN	-	-	-	-	-	-	-	-	-	.-.15*	-	-.15*		.02*	.02*
DIR	.31*	-	.31*	.12*	.21*	.33*	-.19*	.07*	-.12*	-	-.12*	-.12*	.17*	.14*	.31*
PRO	-.34*	-	-.34*	-	-.23*	-.23*	-	-.11*	-.11*	-	.14*	.14*	.46	-.15*	.31*
MON	-	-	-	-	-	-	.27*		.27*	-	-	-	-	-	-
COO	.23*	-	.23*	-	.16*	.16*	-	.08*	.08*	-	-	-	-	.10*	.10*
CACH	-	-	-	.69*	-	.69*	.54*	-.20*	.34*	-.18*	.17*	.01*	.30*	.14*	.44*
CSUP	-	-	-	-	-	-	-.28*	-	-.28*	-	-.14*	-.14*	.15*	-	.15*
CROLE	-	-	-	-	-	-	-	-	-	.51*	-	.51*	.11*	-.07*	.04*
CPOW	-	-	-	-	-	-	-	-	-	-	-	-	-.13*	-	-.13*
R^2		.18			.50			.18			.25			.49	

DE = Direct Effect (β), IE = Indirect Effect (β), TE = Total Effect (β), * p < 05

In conclusion, the result of the analyses for the path model showed that the learning organization model in both private and public hospitals were directly and indirectly affected by leadership behaviors. Leadership behaviors had a positive direct effect on the current organizational culture and learning organization at statistical significant p-value greater than the .05 level in both private and public hospitals. The result of the analysis also indicates that a current organizational culture perceived by subordinates is a mediator variable in this model. Thus, hypotheses two for the private hospitals (2.1, 2.2, and 2.3) were partially accepted by the data. However, hypotheses two for public hospitals (2.1 and 2.3) were partially accepted by the data, while sub-hypothesis 2.2 was accepted by the data. The path model testing for both private and public hospitals has a similar pattern of relationships to the learning organization as the theoretical model proposed in this research study.

4.4 Qualitative Results

The purpose of the second phase in this research study was to determine the specific perceptions and experiences of organizational culture of those involved in the development of a learning organization through quality improvement by using the guideline of quality improvement of hospital Accreditation. One hospital chief executive refused to participate in the semi-structured interview. Thus, the semi-structured interviews were conducted with the eight remaining hospital chief executives in both public and private hospitals. The researcher personally visited each leader's organization; in-person interviews were conducted with the leaders. All participants were assured anonymity for this interview. This part of the chapter thus presents portraits of the individual leaders. It includes summaries of the interviews by using the interview guideline, as displayed in Appendix C

4.4.1 Interview Summary for Leader A

Hospital One: the interview of Doctor A. was conducted on November 20, 2003 at his/her hospital. Dr. A is one of the hospital's executives who is responsible for implementing the quality improvement of the hospital. The interview lasted for 45

minutes from 10.15 – 11.00 a.m. It was aimed at finding the change in organizational culture from the process of quality improvement program.

According to Dr. A, hospital A was the pilot hospital in implementing HA. It first started to introduce the HA process for improving the quality of its service in 1996. However, before the adoption of the HA process, as explained by Dr. A, the hospital had already implemented ISO to improve its quality.

"But the cost of evaluation was so high that the hospital decided not to evaluate the results of the program. Besides, unlike HA, ISO has a materialistic character rather than a spiritual one. The hospital then turned to HA and the top executives were determined to implement it widely and seriously."

To Dr A's knowledge, the organizational culture of hospital A is one of team-based activity and responsiveness. The staff always follows guidelines and policies of the top executives. This is because, he said,

"Our leader, the director of the hospital, is considered 'dai jai' or 'win our hearts.' He is our beloved director and is respected by the majority of the hospital's staff."

As a result, there is a united supportive environment among medical doctors, nurses and other personnel at this hospital.

Regarding the organizational culture of hospital's employees changed over time since participation in HA, Dr. A further explained that during the process of quality improvement, the majority of the hospital's staff fully supported the program. They were pleased to work harder and endure more paper work as well as implement new work processes.

"Of course, there was minor resistance in some areas. But when people received logical explanations, they consequently tried to cooperate and were determined to achieve the success of HA implementation."

Dr. A said that the hospital staff thought that HA and quality improvement was beneficial not only for them, but also for the hospital as whole. They regarded quality improvement as part of their routine work. In addition, he also expressed his opinion that,

"The success of quality improvement is subject to the support of medical doctors. This is because medical doctors have a strong sense of 'utter' or 'ego.' If they

have problems or resist quality improvement or do not have consensus, the quality improvement then faces difficulties in implementation."

Regarding characteristics of organizational culture exhibited dominantly after participating HA, Dr. A explained that the organizational culture of hospital A. helped make the change easier and the resistance to change was minimal. The changing organizational culture was as follows:

1) Working in teams
2) Exchanging ideas without quarrel
3) Utilizing medical doctors' meetings as a place for finding solutions
4) Not aiming at personal benefits
5) Working transparently

Dr. A also holds a firm belief that there will be no problems in sustaining HA/quality improvement at hospital A. To him, this is because of the leader of the hospital who has strong leadership and is most loved by the staff. The characteristics that the leader has shown are as follows:

1) Being a role model in doing good things
2) Being interested in the patients and building a good working culture
3) Being economical and transparent
4) Being more like a family member rather than boss (facilitator, mentor)
5) Caring for others and being friendly
6) Focusing on doing the right thing
7) Being a good listener

In addition, organizational culture also plays an important role in supporting the success of quality improvement. The majority of the staff is bound to the hospital because they are local people and they have worked at hospital A for quite a long time. When the hospital implemented a quality improvement program, they were willing to spend their time after working hours to think about improving the quality of work. Dr. A said that the organizational culture at this hospital helped promote the success of quality improvement.

"It may be said that when the hospital decides to adopt hospital accreditation and is certified by HAT, organizational culture plays a

> significant role in pushing the success of quality improvement. It is the quality improvement system that facilitates organizational learning and, at the same time, the acceptance of change enables the staff to accept learning. But the 'leader' is also an important factor for continuous quality improvement."

In summary, this organization is a public hospital. It would appear that the top leader is the key that gets the staff involvement and acceptance of organizational change. Thus, a good role model of leader is essential for changes in an organizational culture. The data from interviewing also seem to suggest that the top leader has positively influenced a change to achievement-oriented culture and supportive-oriented culture after the implementation of a quality improvement program.

4.4.2 Interview Summary for Leader B

Hospital Two: Doctor B was interviewed for 40 minutes on November 20, 2003 at his Medical Office. Doctor B presently holds the position at the top level of the hospital, which is a public hospital, and is responsible for both management and quality improvement.

Regarding the organizational culture of hospital's employees changing over time since hospital participated in HA, Doctor B explained that "the organizational culture in the hospital has been changed to a certain degree e.g. people are willing to learn new things or concepts, then try to apply them to their work through the trial-and-error method. Consequently, they will improve from the lesson learned. After completing the process of quality improvement and accreditation, some people are aware of its importance and advantages of the organization's change."

According to characteristics of organizational culture exhibited dominantly after participating HA, Doctor B further explained that "in the present organizational culture, most people remain doing work and/or apply the concept of quality to their work in order to pursue their responsible duties via essential monitoring systems. However, only a small number of personnel in the organization still hold the culture of commitment to work for quality improvement with whole-hearted willingness, and also feel the need for organizational success. Therefore, they will try their best to

provide mutual assistance and share knowledge for work improvement and learn how to work as a team." Doctor B believes that "the role of an organization leader is truly crucial to personnel's working behavior. Hence, it is necessary to apply various types of governing processes such as incentives, recognition, power & authority, punishment, and training in order that all personnel will follow such an indicated system, resulting in continuous improvement of quality in medical treatment and services through the process of hospital Accreditation (HA)."

Moreover, Doctor B found that the nature of organizational culture of both the physician and nurse group had been visibly changed, for example, strong work cooperation, commitment to the organization success as formulated in the strategic plan, more open-minded attitude, and acceptance of mistakes by treating them as lessons learned. However, some departments such as the Nutrition Support Department etc. still rendered minimal cooperation. Doctor B added that this resistance came from the following factors:

1) Personnel did not understand HA clearly;
2) communication and channels were still ineffective;
3) Training system was not efficient enough.

He also summarized that it was accepted that there were some changes in the organizational culture but not significant. It will take time to build up the desired culture in the hospital. He admitted that it was not simple to do so because of past values, individual attitudes, and bureaucratic norms.

Regarding characteristics of a preferred organizational culture have in an accredited and certified hospital, Doctor B mentioned that the desired organizational culture should encourage everybody to be committed to work, to be more diligent, creative and productive, to maintain good quality, and be aware of the governing and monitoring system in order to achieve continuous improvement in quality.

In conclusion, it would appear that the organizational culture has been changed in some certain level after the hospital participated in HA. However, it seems that particular professional groups, not the whole organization, exhibited an achievement-oriented culture and a supportive-oriented culture dominantly, as opposed to a role-oriented culture. Only employees who participated in the process of HA implementation had changed their work values and behaviors. The data from

interviewing also seem to suggest that the top leader believed that, to encourage every member in the organization to be involved in changing, the leader has a role to play in creating a climate where organizational members participate in HA with a variety of means. The preferred culture would an achievement-oriented culture at all levels.

4.4.3 Interview Summary for Leader C

Hospital Three: Doctor C was interviewed for 40 minutes on December 20, 2003 at his Medical Office. Doctor C is a member of the Board of the hospital. When they adopted the policy of quality improvement to improve the service quality, it was found that the process of quality accreditation in the hospital created learning in the organization and changes in the organizational culture as well. It was clearly seen that the middle management and the coordinators of quality improvement learned something of value both at an individual and team level. The learning created changes in working behavior and developed the concept of how to improve quality continuously. Even the operational personnel group, learned systematically from the process of quality improvement at a certain level, though it is not significant enough because of limited commitment, many steps to follow, and more responsibilities."

Regarding the organizational culture of hospital's employees changing over time since hospital participated in HA, Doctor C also pointed out that the organizational culture changed only slightly after completing the process of quality accreditation. It was not clearly seen that every person changed his or her concept but his/ her working behaviors were changed and could be observed at a certain level. For example, there were increased dialogues for consultation, problem-solving, knowledge, and opinion exchange among departments; they were more open-minded to accept some mistakes and tried to find solutions, which resulted in fewer conflicts.

Furthermore, Doctor C stated that since quality improvement is a western concept, they could only apply those concept, beliefs, value recognition, and attitude to match with the Thai context when adopted. Hence, it was very difficult for Thai personnel with a Thai working style to adopt some of the concepts effectively. For example, they know only the personal right to do something but were not aware of functions to be accountable for or to what extent.

According to characteristics of organizational culture exhibited dominantly after participating HA, Doctor C also explained that the organizational culture had been incrementally changed since the process of quality improvement was adopted until the time of accreditation.

It could be observed that:

1) Everybody gave cooperation and took part in improving quality, but only to a certain degree;

2) Everybody was committed to work in order to achieve the success of his/her job but not necessarily for the whole department;

3) There was an imbalance of motives for quality improvement and individual aspirations;

4) The leader did not establish the balance between the organization's motives and personal aspirations.

There were some clear changes in the working behavior because the system and process of quality improvement encouraged personnel to value the importance of effectiveness and efficiency more. Most people thought that quality improvement was just another part of a job. However, Doctor C believed that the organizational culture here contained a mixed nature between "achievement" and "support" to a certain extent. Authority was exercised and regulations still existed. Systems in the organization and quality improvement helped provide the learning culture in the organization but not at a high level. More concrete activities to pursue were needed.

Regarding characteristics of a preferred organizational culture to have in accredited and certified hospital, Doctor C said, "the leader in this organization wishes to have a culture of creativity & productivity, a learning culture, awareness of working for quality, and more cooperation in quality improvement. Should all these goals be realized, governing and monitoring will be used less."

This organization is a public hospital. It appears that the organization culture of hospital's employees has changed since they have participated in HA. It can be noticed from the interviewing that the most change in values, attitudes, and working behaviors was at the middle management level, not all levels in the organization. The data from interviewing also seem to suggest that this organization is moving toward an achievement and supportive-oriented culture.

4.4.4 Interview Summary for Leader D

Hospital Four: Doctor D gave a 45-minute interview on November 28, 2003 at the hospital. At present, he holds the senior management position in the hospital. Regarding the organizational culture of hospital's employees changing over time since the hospital participated in HA, Doctor D expressed that the quality improvement for the hospital was a very good issue. It created changes in organizational culture especially after the process of quality improvement had been implemented for a certain period. For instance, personnel in each department could accept both the same and different ideas; seeking assistance and sharing knowledge among various departments could be clearly seen; personnel changed their behaviors and attitudes to the governing and monitoring activities. After adopting the process of quality accreditation, personnel learned how to work "smarter" and their attitudes started to change gradually. For example, "governing and monitoring the quality of medical treatment and services no longer made personnel think that somebody was trying to find their faults."

Doctor D confirmed that the process of quality improvement provided a working system and the operation of personnel with a step-by-step method, leading to a reduction of errors, and more positive outcomes. Though leaders and the quality team still controlled and monitored personnel's operations, personnel still had a good attitude about this process. Doctor D indicated that the leader of an organization is very crucial to changes in the organizational culture. A leader of the hospital is a good example. He puts great effort in doing all jobs. He always renders opportunities to subordinates to work at their best. Consequently, the organizational culture changes the working style to a stronger commitment, which significantly drives continuous quality improvement. According to characteristics of organizational culture exhibited dominantly after participating in HA, Doctor D described that changes in the culture of this hospital had emerged gradually over a period of time. He thought that this change came from the learning process of personnel in practicing quality improvement for the hospital and good leadership of the hospital's leader. Even though not all personnel changed their values and attitudes, most of them understood and agreed that the quality improvement would help them to work better, decrease complaints, lower the rate of incident reports, and increase patients' praise for good

quality of services, resulting in great advantages and profit to the hospital and personnel. All these matters created changes in working behaviors, cooperation, personnel incentives, and relationships among departments etc.

Hospital Four is a private hospital. It appears that organizational culture change has occurred gradually and especially after the process of quality improvement had been implemented for some period of time. The interview data seem to suggest that the commitment of leaders motivates and influences their subordinates to learn and change their working behaviors in participating in HA, even though not all employees changed at the same rate or to the same extent. It could be concluded that an achievement-oriented culture and outcome-oriented culture now exists in this organization.

4.4.5 Interview Summary for Leader E

Hospital Five: Doctor E gave an interview on December 24, 2003 for 45 minutes at his office in the hospital. He is in a position of management and is the President of the physician organization of the hospital. Doctor E had experience on hospital Accreditation (HA) both before and after the process. Regarding the organizational culture of hospital's employees changing over time since the hospital participated in HA, he said that at the first stage of adopting HA to improve the quality of the hospital, most personnel thought that it would create a great burden and it would not help increase market share. At that time, it was apparent that there was no clear cooperation and commitment. However, the leader of the organization and Department Managers tried to improve the hospital by applying HA in a more concrete way. After that, the learning of personnel in quality improvement rendered changes in working behavior. It could be proved by changes in ways of thinking, and attitude on quality improvement. Doctor E mentioned that there were some increases in dialogue between individuals and groups, more openness for different ideas, fewer conflicts among groups, and problem-solving sharing, especially in the physician group. It was very difficult to change physicians or order them to do anything because they are somewhat arrogant. It would be easier if a consensus of the organization asked them to do something. Doctor E also believed that if personnel in the hospital had learning experiences, such as using trial-and-error method, asking

from experts, studying from the HA handbook, sharing and exchanging knowledge, it would create great change in the organization, leading to gradual change in the organizational culture.

According to characteristics of organizational culture exhibited dominantly after participating HA, it has been found that the commitment to achieve mutual objectives brings about mutual cooperation and support. Finally, continuous quality improvement will be realized, resulting in maintaining the hospital's quality which can be checked and controlled by systems.

This organization is a private hospital. It appears that the organizational culture and employees' attitudes have changed gradually since they have participated in HA. HA gained more successful implementation after the employees learn or have experience in participating. The interview data shows that the learning of employees in quality improvement rendered changes in working behavior. It seems to show that the various types of organizational culture do exist in this organization. There are elements of an achievement and supportive-oriented culture as well as role-oriented culture.

4.4.6 Interview Summary for Leader F

Hospital Six: Doctor F gave a 50-minute interview on November 21, 2003. He is in the management level of the hospital, which is a public hospital, and has worked here for about 20 years. This hospital has been accredited for about three years. Regarding the organizational culture of hospital's employees changing over time since the hospital participated in HA, he said that when implementing the process of improvement and quality accreditation, the hospital found that there were changes in employees' values and way of working. For example, there was an increase in devotion and a unified desire of personnel for change, including learning new techniques such as risk management, Protocol Care Map etc. On the part of physicians, before implementation, it was very difficult to call a meeting once a month but after the HA, it was better. Doctor F further said that when HA was first adopted, some personnel did not agree and opposed the change with the thought that the old system was good, while the new one created more troubles; the new one increased responsibilities, and they would lose benefits from decentralization.

Doctor F also mentioned that when the hospital had implemented quality improvement for some time, personnel started to learn and this led to changes in working behavior.

According to characteristics of organizational culture exhibited dominantly after participating in HA, he said that it is apparent that the working attitude has been changed; for example, even though it is an informal meeting, physicians still attend it and try to render better cooperation. They are more open-mined. There is support and assistance among departments, acceptance of faults in the Departments of Nursing and Medical Science." However, Doctor F stated that changes in organization culture, learning behavior of personnel, and working behavior depended primarily on the leader of the organization. If the leader checked and monitored actively and seriously, and put forth an all-out effort, the process of quality improvement would be strong too. The continuous quality improvement would not be difficult anymore. Regarding characteristics of preferred organizational culture to have in accredited and certified hospital, he summarized, "the desired changes depend on the leader's true commitment."

The findings from interview data seem to imply that the desired changes depend on the leader's true commitment. The commitment of leaders would influence the organizational change and eventually it would lead to change in an organizational culture. It appears that particular professional groups in this organization, not the whole organization, change not only their working behaviors but also attitudes to some degree. This hospital is likely to move toward to having a more supportive-oriented culture in place.

4.4.7 Interview Summary for Leader G

Hospital Seven: Doctor G gave an interview on January 10, 2004. The interview lasted for 45 minutes. Doctor G holds the positions of manager and quality improvement coordinator in the hospital. Doctor G stated that this hospital had implemented HA for about two years. He has worked at the hospital before and after the HA. Regarding the organizational culture of hospital's employees changing over time since hospital participated in HA, he said "the quality improvement is good to improve various processes in the hospital in order to reach the standard." He noticed

that after HA, the organizational culture did not change significantly; working behavior, and attitude on quality was almost the same. There was less mutual assistance and cooperation among departments because personnel thought that quality improvement was the development of an increased paperwork system. They put importance on paperwork rather than on medical treatment and services. Therefore, there was separation between physicians and nurses. According to characteristics of organizational culture exhibited dominantly after participating in HA, Doctor G further added, “In my opinion, there is less change in organizational culture after HA. However, there is external feedback that behaviors in medical treatment, administration, process, and working steps are better and can be obviously seen. I work in the hospital, and feel that the change is not significant.” He also added that some personnel in the hospital believe that the quality improvement program will relieve the workload, lessen the occupied-bed rate, and improve relationships between patients and healthcare workers. However, some still think that quality improvement is another burden to be responsible for.” Finally, Doctor G concluded that the learning of overall personnel in the hospital was very difficult. Even though there was HA, the working behavior did not follow the indicated standard. Regarding characteristics of preferred organizational culture to have in accredited and certified hospitals, he was of the opinion that the leader of the organization was the major factor and must recognize the importance of organizational culture development along with quality improvement. This would lead to true cooperation, personnel’s commitment to work in achieving the vision and mission, self- motivation, and continuous quality improvement at last.

This organization is a public hospital. The findings from interview data seem to imply that HA was not enthusiastically accepted by the hospital, nor was it strongly supported by management, and hence the organizational culture did not change significantly. Less mutual assistance and cooperation could be observed in this organization. The interview data shows, however, that there is external feedback that behaviors in medical treatment, administration, process, and working steps are better and can be obviously seen after participation in HA. It would be difficult to conclude what specific type of organizational culture exists, but it is likely to be the role-

oriented culture. The supportive-oriented culture and an achievement-oriented culture would be the preferred culture to achieve the stated organizational goal.

4.4.8 Interview Summary for Leader H

Hospital Eight: Doctor H was interviewed for 40 minutes on January 21, 2004 at his office in the hospital. Presently, he is in a management position and is the President of the physician group of the hospital. Hospital eight has had HA for about two to three years. Doctor H has worked at this hospital for more than 10 years and experienced the transitional period both before and after HA. Doctor H stated, "The hospital concentrates on the outcomes and treatment, it stresses revenues and expenses. Therefore, it has to be careful on any expenses incurred. The hospital tries to lessen or delete any unproductive activities." However, when adopting the process of HA, the leader thought that the business planning and the quality improvement were the same issue. Regarding the organizational culture of hospital's employees changing over time since the hospital participated in HA, Doctor H added that after implementing HA for a certain time, the organizational culture has apparently been changed at all levels in the organization. He noticed that:

1) The commitment of the leader provides the supporting environment in the organization. For example, there is active support for the organization's structural change, corresponding to improved quality, more recognition of personnel development, which motivates overall personnel in the hospital, better budget allocation for personnel development, and a budget for research and development, a change from direct control by the CEO to the empowerment style. In the past, all decision-making was solely at the top leader of the organization; after implementing HA, there are improvements at all levels. Top leaders empower the lower level to make many decisions. Personnel learns leadership skills and/or to be a good follower. They can utilize their own creativity, and express their ideas.

2) The main responsibility of department or section managers is taking care of their agencies. When adopting quality improvement through cross-functional teams, there is a change in way of working. He noticed that there is better coordination, mutual support, and easier acceptance of different ideas. Finally, with regard to team learning:

3) Personnel at the operational level learn such techniques as the patient care team and cross-functional team from the process of HA. These two processes are the real mechanisms of change in the organizational culture. According to characteristics of organizational culture exhibited dominantly after participating in HA, Doctor H noticed that there is more dialogue, better coordination, changes in working styles, and more open-mindedness."

"The problems, which were hard to solve in the past, tend to be solved easier in the present. All outcomes are better." Doctor H concluded that there was a change for the better in organizational culture. However, it needed time, a good leader who provided a good environment and conditions for learning in the organization, and lastly a relevant management system in the organization.

Regarding characteristics of preferred organizational culture to have in an accredited and certified hospital, Doctor H saids "From my perspective on organizational culture, I wish all personnel would be aware of and realize that quality improvement is not a project or an activity. Quality is an attitude and value to lessen disturbances from cost of poor quality in the health business, such as faults in work, duplicated work, and under-standard work, which need close monitoring. The last wish is to gain more empowerment in this organization and a more supportive environment for mutual assistance."

This organization is a private hospital. The findings from interview data seem to imply that organizational culture change has occurred at all levels namely top leader, middle level of management, and practical level. The organizational culture with an achievement-oriented culture and a supportive-oriented culture are exhibited dominantly after participating in HA. The data indicates that the top leader is an essential contributing factor in organizational change and in changing the organizational culture as well. The preferred organizational culture will be an achievement and supportive-oriented culture in order to achieve sustainable quality improvement.

4.4.9 Summary

These semi-structured interviews focused on eight leaders, who were working in both private and public hospitals. Each leader reported on the various aspects of

organizational culture change over the time since they have participated in hospital accreditation. Most leaders believed that a current organizational culture was adjusted from the learning process of implementation of hospital accreditation. Although some hospitals believed changes in organizational culture did not exist, outsiders were able to notice from the change in working style of employees.

4.5 Conclusion

The finding of hypothesis One and four sub-hypotheses supported that the overall attributes of a learning organization with all independent variables (eight roles of leadership behavior) entered explained 20% (adjusted R-squared was .181), of the variance in learning organizations with only one significant predictor. Thus, the transactional leadership behavior of producer role made significant contributions to the explanation of overall attributes of a learning organization. Vision/mission and organizational strategy, organization and job structure, knowledge system, and performance and development of a learning organization with all independent variables (eight roles of leadership behavior) entered explained 19% (adjusted R-squared was .169), 24 % (adjusted R-squared was .222), 30% (adjusted R-squared was .272), and 22 % (adjusted R-squared was .196) respectively of the variance in the learning organization with only one significant predictor. Thus, the producer role made significant contributions to the explanation of each attribute of the learning organization. For research question two, the findings supported that the two major patterns of development of a learning organization in both private and public hospitals were directly influenced by the leadership behaviors and the learning organization was indirectly influenced by the leadership behaviors through a current organizational culture. Therefore, the hypothesis result of 2.1 indicates the first pattern of learning organization model. The subordinates of private hospitals perceived that the development of a learning organization in private hospitals was directly positively influenced by the transformational leadership role of broker and the transactional leadership behavior of director. When examining the perception of subordinates in public hospitals, it was found that the development of a learning organization in public hospitals was directly influenced with positive effect by the transactional

leadership behaviors of the director role and the producer role. The findings from the combined analysis between hypothesis 2.2 and 2.3 illustrated the second pattern of learning organization model in both sectors with the various forms of a learning organization. These learning organization forms will be presented in the next chapter.

The semi-structured interviews focused on eight leaders, who were working in both private and public hospitals. Most leaders believed that the current organizational culture was adjusted from the learning process of implementation of hospital accreditation. The most important contributing factor is that organizational members learned how to learn from the process of hospital accreditation. The next chapter will present concluding remarks for the study, including an overview of this research study, key findings, and a discussion of the results. Implications for practice will be offered along with recommendations for future research.

CHAPTER 5

SUMMARY, DISCUSSION AND IMPLICATIONS

This final chapter restates the purpose of the study, summarizes the overview of this research study, presents key findings and provides a discussion of the results. Implications for practice are offered, along with recommendations for future research.

5.1 Restatement of Purpose

The purpose of this study was to examine the relationship of managerial behaviors of transformational and transactional leadership roles, of organizational culture, and the attributes of the learning organization of private and public accredited hospitals. The study was designed to gain insights into conditions that may have the capacity to promote successful change in hospitals.

5.2 Overview

The study contributes empirical knowledge regarding the perceptions of leadership behaviors, organizational culture and its relationship to learning organizations. Thus, the chief executives and subordinates' perceptions of leadership behaviors and organizational culture were explored in relationship to attributes of the learning organization, namely shared vision and mission, organizational strategy, organizational structure, job structure, knowledge system, and employees' performance and development. The design of the study was primarily survey research. However, both quantitative and qualitative methods were employed to derive data. The data were collected from a sample of nine hospitals from both the private and public sectors in different locations. A random sampling technique was used to select

private and public hospitals from the frame list of Hospital Accreditation provided by HAT. The three instruments utilized in this study are the transactional and transformational leadership instrument based on the competing values framework (Belasen, et al., 1996; Quinn, et al., 2003), the learning organization practices inventory based on Bennett and O'Brien (1994), and the diagnosing organizational culture assessment based on Harrison and Strokes (1992). Along with descriptive statistics, the analyses included stepwise multiple regression, and path analysis.

5.3 Summary of Findings

Discussion of each finding is organized around the two major research questions addressed in this study. Table 5.1 summarizes the hypotheses formulated for both private and public hospitals. Each table states the hypotheses, the measurement perspectives for the variables, and whether or not statistical analysis supported each hypothesis.

Table 5.1 Summary of Findings

Hypo-thesis	Hypothesis (showing IV and DV)	Perspectives	Finding
H1	Leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators are significantly related to the overall learning organization.	Perceptions of hospital administrators	Partially accepted
H1.1	Leadership behaviors as perceived by administrators are significantly related to vision / mission and organizational strategies.	Perceptions of hospital administrators	Partially accepted

Table 5.1 Summary of Findings (Cont'd.)

Hypo-thesis	Hypothesis (showing IV and DV)	Perspectives	Finding
H1.2	Leadership behaviors as perceived by administrators are significantly related to organizational and job structure.	Perceptions of hospital administrators	Partially accepted
H1.4	Leadership behaviors as perceived by administrators are significantly related to performance goal and individual / team development.	Perceptions of hospital administrators	Partially accepted
H2.1	The development of learning organization is directly affected by leadership behavior.	Perceptions of hospital subordinates	Partially accepted
H2.2	The development of a learning organization is directly affected by a current organizational culture (achievement, support, role, and power–oriented culture).	Perceptions of hospital subordinates	Partially accepted
H2.3	A current organizational culture is directly affected by leadership behavior.	Perceptions of hospital subordinates	Partially accepted

5.3.1 Descriptive Statistics Results

The majority of chief executives were physicians, aged more than 50, and had been employed at the current hospital for more than 10 years. Most of the middle administrators and subordinates were professional nurses or technicians, age 31-50, with a Bachelor's degree in a nursing or technical field and had been employed in the health care field more than 10 years.

On a scale of one to five on leadership behavior role, chief executives in both private and public hospitals in this study assessed themselves to be above the midpoint for each of the eight leadership roles. The scores of the chief executives on each of the eight managerial roles ranged from 4.07 to 4.58. Such results indicated that these chief executives did not adopt any predominant managerial role and that each role was present fairly often to frequently. Mentor was the private hospital chief executives' highest-scoring role; this role comprises the human relations model, suggesting that they were reasonably well skilled at understanding themselves and others, at communicating and at developing their subordinates. In contrast, the public chief executives in this study indicated producer was their highest-scoring role. This role fits the rational goal model, suggesting that these chief executives were reasonably well skilled at working productively, at fostering a productive work environment, and at managing time and stress.

While the chief executive scores were high, indicating self-perception is quite good, Quinn, et al. (2003) suggests the goal is to become a "master manager" by excelling in each of the eight roles. The first implication is obvious, that all chief executive will become adept in each role. The second implication is somewhat subtler, that good managers will achieve a balance in executing all eight roles.

On a scale of one to five on leadership behavior, their subordinates in both private and public hospitals in this study also evaluated their leaders to be above the midpoint for each of the eight leadership roles. However, the mean scores were significantly lower than the self-perception scores. The subordinates' scores of the chief executives on each of the eight managerial roles range from 3.46 to 3.83. Such results indicated that they did not have any predominant managerial role and that each role was present sometimes to fairly often. Subordinates perceived producer was the private and public's chief executive highest-scoring role, suggesting that these chief executives were reasonably well skilled at working productively, at fostering a productive work environment, and at managing time and stress.

In sum, chief executives in both private and public hospitals perceived that transformational leadership best described their leader behaviors more than transactional leadership behavior. In contradiction, their subordinate's perception toward to their leader behaviors in both private and public hospital was that they

exhibited transactional leadership more than transformational leadership. Thus, the results from descriptive statistics show the perception of leaders in both private and public hospitals show some discrepancies between self-perception and perception of subordinates.

Regarding types of organizational culture, the perceived current dominant culture role of subordinates in both private and public hospitals indicated that role-oriented culture best described their organizational culture. The power-oriented culture (2.68) and the achievement-oriented culture (2.65) were the second and third most descriptive of a current organizational culture and the supportive-oriented culture (2.38) was the least descriptive of their organizational culture at private hospitals. For public hospitals, the achievement-oriented culture (2.71) and the support-oriented culture (2.63) were the second and third most descriptive of a current organizational culture, and the power-oriented culture (2.55) was the least descriptive of their organizational culture.

The findings from descriptive statistics show the perceived preferred dominant culture role of subordinates in both private and public hospitals had a similarity of preference. They see an achievement-oriented culture as the most desirable organizational culture. The support-oriented culture and the role-oriented culture were the second and third most descriptive of their preferred organizational culture, and the power-oriented culture was the least descriptive of their preferred organizational culture in both private and public hospitals.

With regards to the learning organization, the highest mean score expressed by the private hospital's employees' perception in each of the dimensions of the learning organization practice inventory on a scale of one to five was in shared vision/mission & organizational strategy with a mean score of 3.76, while the lowest mean score recorded was in the knowledge system with a mean score of 3.45. For the public sector, the highest mean score exhibited by their employees was also in shared vision/mission & organizational strategy with a mean score of 3.82, while the lowest mean score recorded was in the job structure & organizational system with a mean score of 3.55. Thus, the building of a shared vision/mission and organizational strategy to serve quality improvement was a major emphasis of both sectors. However, the second attribute of a learning organization at the private hospitals was

related to their employee's performance oriented-outcome and development, while at public hospitals was related to individual and team-level learning (acquisition), shared information, and utilizing the knowledge in the work process. In spite of the differences, employees in both private and public hospital had similar mean scores in their perceptions of a learning organization.

5.4 Discussion of Research Questions and Hypotheses Testing

The summary and discussion of the findings from the data collected concerning the two research questions of this study are as follows:

5.4.1 Research question # 1: What is the relationship between eight roles of leadership behaviors perceived by administrators of private and public hospitals certified & accredited by HAT and the learning organization and each of its attributes?

Hypothesis 1 stated leadership behaviors (transformational leadership behaviors: mentor, facilitator, innovator, and broker role; transactional leadership behaviors: director, producer, coordinator, and monitor role) as perceived by administrators are significantly related to the overall learning organization. A stepwise multiple regression was conducted to examine the relationships. Each of the eight roles of transformational and transactional leadership behavior was regressed on the overall attributes of learning organization. Producer role accounted for 20% of the variance in the overall learning organization. No other role of leadership behavior variable had a significant effect. Thus, the F score (7.401) was significant at the .05 level. Hypothesis 1 was therefore partially accepted.

Hypothesis 1.1 stated that the leadership behaviors (transformational leadership behaviors and transactional leadership behaviors) as perceived by administrators are significantly related to vision / mission and organizational strategies. A stepwise multiple regression was conducted to examine the relationships. Each of the eight roles of transformational and transactional leadership behavior was regressed on the vision / mission and organizational strategy of the learning organization. Producer role accounted for 20% of the variance in overall learning

organization. No other role of leadership behavior variable had a significant effect. Thus, the F score (6.907) was significant at the .05 level. Therefore, hypothesis 1.1 was partially accepted.

Hypothesis 1.2 stated that the leadership behaviors as perceived by administrators are significantly related to organizational and job structure. A stepwise multiple regression was conducted to examine the relationships. Each of the eight roles of transformational and transactional leadership behavior was regressed on the organization and job structure of learning organization. The producer role accounted for 25% of the variance in the overall learning organization. No other role of leadership behavior variable had a significant effect. Thus, the F score (9.279) was significant at the .05 level. Thus, hypothesis 1.2 was partially accepted.

Hypothesis 1.3 stated that the leadership behaviors as perceived by administrators are significantly related to the knowledge system. A stepwise multiple regression was conducted to examine the relationships. Each of the eight roles of transformational and transactional leadership behavior was regressed on the knowledge system of learning organization. The producer role accounted for 30% of the variance in the overall learning organization. No other role of leadership behavior variable had a significant effect. Thus, the F score (11.841) was significant at the .05 level, and hypothesis 1.3 was partially accepted.

Hypothesis 1.4 stated that the leadership behaviors as perceived by administrators are significantly related to performance goals and individual / team development. A stepwise multiple regression was conducted to examine the relationships. Each of the eight roles of transformational and transactional leadership behavior was regressed on the performance goal / feedback and individual and team development of a learning organization. The producer role accounted for 22% of the variance in the overall learning organization. No other role of leadership behavior variable had a significant effect. Thus, the F score (8.062) was significant at the .05 level. Hypothesis 1.4 was, therefore, partially accepted.

According to the research findings of hypothesis one and four sub-hypotheses mentioned above, chief-executives' perception in both private and public hospitals viewed themselves as leaders performing transactional leadership behavior with producer role, which was shown as a significant predictor on development of the

overall learning organization and each of its attributes. Based on these result findings it indicates that chief executives in both private and public hospitals are very concerned with their personal productivity and that of their employees. They reflect this in the producer role, where they emphasize creating higher performance expectations in others, focusing on results, and spending more energy in motivating others (Belasen, et al., 1996: 270). Because the ultimate criteria of organizational effectiveness in terms of quality improvement are productivity and profit, the ultimate value of both public and private hospital is achievement and profit maximization. In order to meet the ultimate values of the organization, the leader views their managerial leadership behaviors as a task-oriented producer by being self-motivated and committed, motivating others, and empowering subordinates to pursue productivity (quality of services). In this regard, the pressure of the increasingly competitive environment in the healthcare market led chief executives to focus more intensely on the producer role. They are reflected in individual managerial leaders being personally "productive"—motivated, empowered, and committed (Quinn, et al., 2003: 219). These chief executives employed three competencies for developing a learning organization after the journey toward hospital accreditation, namely working productively, fostering a productive environment, and managing time and stress while balancing competing demands in order to get the hospitals accredited and certified by HAT as well as having the potential to delivery quality of care to fulfill customer needs. Regarding the significant relationship of each attribute of a learning organization, this research study showed the producer role is more significant in relation to the knowledge system. On the basis of this finding, it appears that chief executives in the producer role emphasized the knowledge system and the development of new knowledge and insights that have the potential to influence behavior. In this context, learning how to implement hospital accreditation facilitates changes in behavior that lead to improved individual and team performance. Garvin (1993: 80) said a learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insight. Even though no previous research studied the relationship between eight managerial roles of leadership behavior and the learning organization, many scholars and researchers have indicated that leadership has a vital role to play in

creating a learning organization (Senge, 1990; Watkins and Marsick, 1996; and Marquardt, 1996). When organizations are asked to learn, develop and utilize knowledge as a way to embrace change and to innovate, to solve problems and to accomplish tasks, there must be a catalyst to stimulate a learning environment to create a learning organization. Leadership, thus, is viewed as a change agent essential for the development of learning organizations. Garratt (1987) believes that the leadership roles of the top leaders are crucial to the learning organization because those people at the top of an organization are responsible for giving it direction and purpose. However, if the roles of leadership behaviors were collected during the transitional period of hospital accreditation, chief executives might perceive the need to increase their performance of the transformational leadership behavior roles (facilitator, mentor, innovator, and broker role), just as the theory predicts.

5.4.2 Research question # 2: To what extent did the leadership behaviors directly affect the development of a learning organization and indirectly affect the development of a learning organization via a current organizational culture as perceived by subordinates both private and public hospitals certified and accredited by HAT?

To investigate the answer for this research question, three hypotheses, 2.1, 2.2, and 2.3, were tested by using the structural equation model. Thus, the results of these hypotheses testing reported in the previous chapter would suggest that there are two major patterns of development of a learning organization model in both private and public hospitals. First, the subordinates from both sectors have perceived that the learning organization model was influenced by the managerial role of leadership behaviors that were performed by the chief executive leader. Secondly, they also have percieved that the managerial roles of chief executive behaviors in affecting the learning organization model are primarily executed through the current organizational culture.

Hypothesis 2 was sub-divided into Hypothesis 2.1, 2.2, and 2.3. These three will be presented and discussed separately in order to gain more understanding.

5.4.2.1 Hypothesis 2.1 investigated the learning organization model of private hospitals. The first pattern of the findings from hypothesis 2.1 indicated that

there are two paths with positive effects and two paths with negative effects on the development of a learning organization model in private hospitals. This finding supports previous claims made by Garratt, 1987; Senge, 1990; Watkins and Marsick, 1996 and Marquardt, 1996. They illustrated that the leadership roles of the top leaders are crucial to the learning organization. Leadership, thus, is viewed as a change agent, and is essential for the development of learning organizations. These are described respectively as follows:

1) Two paths with positive effects on the development of a learning organization are:

(1) Director role ⟶Learning organization

(2) Broker role ⟶ Learning organization

2) Two paths with negative effect on the development of a learning organization are:

(1) Producer role⟶ Learning organization

(2) Monitor role⟶ Learning organization

However, the other leadership behavior roles namely facilitator, mentor, innovator, coordinator role had no significant effect on the development of a learning organization.

Referring to path 1(1), differences in organizational characteristics between private and public hospitals, then, should also affect the relationship between the learning organization and leadership behaviors. Heffron (1989: 13) said that the private sector refers to for-profit enterprises. In addition, private hospital goals are less ambiguous than those in the public hospital because they can be evaluated in terms of economic outcomes. Leaders in the private hospital have control over rewards and goals are determined by the leaders themselves. They can direct and motivate their subordinates. It seems clear then, that private leaders have more discretion to get people to accomplish stated organizational goals. Because they have more discretion in exercising this role, subordinates perceived that private hospital leaders as having a managerial director role, which created a direct path to the learning organization.

This indicates that performing more effectively in the director role will have a positive influence on the development with a fruitful learning organization because this kind of leadership behavior reflects three competencies, namely developing and communicating a vision, setting goals and objectives, and designing and organizing. Therefore, the major emphasis on successful implementation of a quality improvement program is building a shared vision/mission because information about the vision and mission of an organization is critical to empowering employees and developing innovative organizations. Without this, people will not extend themselves to take responsibility or apply their creative energies. Having shared vision and missions that are supported by employees is, therefore, a critical strategic building block of a learning organization (Bennett and O'Brien, 1994: 41-48). If this is widely shared and understood by employees they will feel more capable of taking quality improvement initiatives. A clear understanding will mean actions that are aligned with the organization's goals and mission. This finding is consistent with learning organization literature presented in Chapter Two. Garratt (1987), Senge (1990), Bennett and O'Brien (1994: 41-48), Watkins and Marsick (1996), Hitt (1996), Barnsley, Lemieux-Charles, McKinney (1998), Bokelman (1998), Goh (1998), Davies and Nutley (2000) and Hassounah (2001) stated that an organization and its members must have a vision of where they want to go so that they can anticipate what they need to learn to achieve the organizational mission because building a shared vision is necessary for fostering a long-term commitment. In addition, the development of a learning organization in private hospitals is a good example for other hospitals, where leaders spend considerable time articulating a vision and creating employee commitment to achieving it.

With regard to path 1(2), leaders in private hospitals must show flexibility and adaptability in handling market forces and need to know how to obtain the financial and non-financial resources from their bosses so they can produce effective outcomes. A private organization is characterized as a profit- making unit, in which the organization focuses on adaptability and responsiveness to the external environment. The broker role reflects an open systems model and the core competencies associated with building and maintaining a power base, negotiating agreement and commitment, and presenting ideas effectively (Quinn, et al., 2003:

261). Therefore, the subordinates saw that the chief executive in the broker role can influence the hospital system moving toward a development of learning organization.

Referring to path 2(1), leaders in private hospitals who perform primarily a monitor role have a negative correlation with the development of a learning organization. This means when the level of monitor role goes up, the level of learning organization goes down. This finding supports the assumption that the monitor role might be considered to be in the negative zone of leadership roles. The negative zone of monitor role makes a normally effective leader ineffective. To illustrate this, Faerman and Quinn (1985 Quoted by Quinn, et al., 2003: 20) developed the concept of the "negative zone", in which leaders playing the monitor role push too much. Under this circumstance, the monitor role eventually has a negative impact on subordinates. In this regard, subordinates perceive that the competency with analyzing information with critical thinking is inhibited, resulting in unimaginative ideas, and see monitoring individual performance and process as tedious work. Finally, leaders neglect possibilities and trivial rigor. Therefore, it can be concluded that the monitor role will not enhance the level of a learning organization because it is a barrier to building a shared vision/mission, and to maintaining subordinates' motivation.

Referring to path 2(2), the finding supports the idea of a negative zone of leadership role as presented by Quinn, et al. (2003: 20-22). The negative zone means while a person may become very strong in a given role, and this strength may carry him or her a long way in his or her career, this does not necessarily mean that he or she will be an effective managerial leader. The last form of learning organization showed that overusing the producer role will inhibit the developmental level of a learning organization. When leaders in the producer role place emphasis on task-oriented accomplishment, and productivity as their priority concern, the effective producer role has a negative impact on subordinates, and eventually on the organization. As a result, subordinates perceive the concern with increasing productivity and fostering a productive work environment as perpetual exertion and human exhaustion. Finally, the producer role will be seen as an overachieving individual who destroys cohesion in an organization. Therefore, it can be concluded that overemphasis on the producer role will not enhance the level of learning

organization because it is a barrier to building a shared vision/mission, and to maintaining subordinates' motivation.

5.4.2.2 Hypothesis 2.2 and hypothesis 2.3 **(*private hospital*)** were investigated and analyzed together. The second pattern of the learning organization model found from hypothesis 2.2 and 2.3 indicated that there are two paths with positive effect and four paths with negative effect on the development of a learning organization in private hospitals. These are:

1) The paths with positive effects on the development of a learning organization are:

(1) Coordinator role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ learning organization.

(2) Coordinator role⟶achievement-oriented culture⟶ role-oriented culture⟶ learning organization

2) The paths with negative effects on the development of a learning organization are:

(1) Producer role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ learning organization.

(2) Producer role⟶ achievement-oriented culture⟶ supportive- oriented culture⟶ role-oriented culture⟶learning organization.

(3) Producer role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ role-oriented culture⟶ learning organization.

(4) Producer role⟶ achievement-oriented culture⟶ role-oriented culture⟶ learning organization.

In sum, the paths of the learning organization mentioned above, indicate there are only two paths that have a positive direct and indirect effect on the development of learning organizations in private hospitals.

The finding of path 1(1) indicates that chief executive who displays transactional leadership behavior (the coordinator role) reflects the internal

process model of organizational effectiveness. Quinn, et al. (2003: 4) said the internal process model represents the professional bureaucracy; a hospital can be defined as professional bureaucracy because the jobs health care providers do today increasingly require a high level of specialized expertise and demand professionals delivering quality care to the healthcare market. The professional bureaucracy, thus, relies on coordination and on the standardization of skills and knowledge as well as association with various subunits. In this organizational structure design, there is the tendency for subunit conflicts to develop (Robbins, 1990: 291). Moreover, in the professional bureaucracy, Heffron (1989: 42) asserted no one can tell the experts how to perform assigned tasks-they alone possess the knowledge and skill necessary to perform them. Thus, authority is based on expertise, not hierarchical position in this type of organization. Once the organization initiated Hospital Accreditation in order to gain cooperation and collaboration to lead to successful organizational change, the coordinator role determines the nature of interdependency among healthcare workers and becomes even more vital. The nature of interdependency in turn influences the nature of change in the organization. Thus, coordinating work does not mean that the leader makes all the decisions regarding work design and workflow or that the work must be routinized. Instead it means that it is the responsibility of the coordinator to see to it that the right people are in the right place at the right time to perform the right task, potentially involving employees in any or all aspects of this task as appropriate. Finally, the leader in a coordinator role brings together groups within the organization to work interdependently as well.

In addition, the coordinator role focuses on three interrelated competencies mentioned in Chapter Two that are the keys to influencing not only motivation and commitment but also gaining cooperation of subordinates. These three competencies are vital to maintaining smooth work processes so that the private hospital can respond to change in a way that is simultaneously flexible and controlled when necessary. As a result, subordinates want to contribute and value teamwork and friendship, interdependence and initiative in high-energy work situations, so that the subordinates are committed to, and supportive of the vision and mission of the organization. Harrison and Strokes (1992: 21-22) explained that the pure support culture seldom is found in business because it is not results-oriented enough to enable

a business to be competitive. However, a supportive culture makes its best contribution in dynamic tension with an achievement orientation. The latter releases and focuses the personal energy that is evoked by a love of doing and by sense of high purpose and worthy mission. In conclusion, the development of a learning organization from the learning process of how to initiate and implement hospital accreditation successfully is affected by the leader in the coordinator role through the achievement culture and the supportive culture, respectively.

According to the path 1(2), the research results would suggest that the development of a learning organization from the learning process of how to initiate and implement hospital accreditation successfully is affected by leaders in the coordinator role through the achievement culture and the role culture, respectively. Harrison and Strokes (1992: 15-16) support this finding that new approaches to management such as employee involvement and Total Quality Management (TQM) attempt to blend the role orientation's emphasis on well-designed and closely managed systems with the empowerment of employees that is typical of the achievement orientation. These approaches endeavor to make the system serve the workers and, thus, to combine the economic effectiveness of the role orientation with the high energy of the achievement culture.

However, the findings (hypothesis 2.2 and 2.3) also indicated a negative influence of the supportive-oriented culture on the role-oriented culture. It indicates that the contradiction between the supportive-oriented culture and the role-oriented can be obviously seen in the private hospital. Thus, the effect of both cultures does not influence organizational members into having a learning culture in order to develop a learning organization. When the supportive-oriented culture goes up, it slows the decision-making process, suppresses conflict among subordinates, and tends to put the individuals' needs over the needs of the organization. Thus, subordinates in the supportive oriented hospital are not strongly task-oriented and may not deal with the conflict. In this regard, they will not follow a well-designed system and structure in the role-oriented organization. In conclusion, the paths 2.1, 2.2, 2.3, and 2.4 of learning organization in private hospitals, which have both supportive-oriented cultures and role-oriented culture in place, do not enhance the development of a learning organization.

5.4.2.3 Implications for Private Hospitals

The transactional leadership behavior (the director role) and the transformational leadership behavior (the broker role) are recommended for development of a learning organization, if there is an organizational climate with employees having reciprocal assistance, commitment towards organizational vision and mission, openness, and trust.

Although the achievement-oriented culture had an indirect effect on the learning organization, it is the most important contributing factor, the same as the supportive-oriented culture for private organizations because it is a starting point that influences the development of a learning organization via supportive and role-oriented culture. Therefore, without an achievement-oriented culture, the development of a learning organization will not exist.

The transactional leadership behavior (the producer role) should be avoided because it inhibits an achievement-oriented culture and the development of a learning organization.

The suggestions to develop the sustainable learning organization in this sector are that chief executives need to perform their leadership behaviors with emphasis on the coordinator role and build a current organizational culture with achievement-oriented culture as a priority, and supportive-oriented culture or role-oriented culture in order to create the learning organization.

5.4.2.4 Hypothesis 2.1 **(*public hospital*)** investigated the learning organization model of public hospitals. The first pattern of the findings from hypothesis 2.1 indicated that there are two paths with positive effects and one path with a negative effect on the development of learning organization model in public hospitals.

1) The two paths with a positive effect on the development of a learning organization are:
   (1) Producer role ⟶Learning organization
   (2) Director role ⟶ Learning organization
2) One path with a negative effect on learning organization is:
   (1) Broker role⟶ Learning organization

The other leadership behavior roles namely facilitator, mentor, innovator, coordinator, and monitor role had no significant effect on the development of a learning organization.

Regarding paths 1(1) and 1(2), the producer role had the highest direct effect (.49) and the second highest direct effect is the director role on the development of a learning organization. Both two roles are in the rational goal model. The criteria in this model are an organization effectiveness emphasizing productivity and profit. The basic means-ends assumption in this approach is the belief that clear direction leads to productive outcomes (Quinn, et al., 2003: 4). Thus, the organizational climate is viewed as rational economic. The characteristics of an organization within a rational goal model described by Quinn, et al. (2003), represents an organization with a profit motive. This finding, in public hospitals, is contradictory. Heffron (1989: 12-13) said public organizations have vague and multiple goals that are difficult to measure and frequently conflicting. Thus, public organizations tend to have goals that are difficult to quantify, meaning that it is difficult to measure outcomes. However, Keeling (1972: 148) argued that determining whether the identified differences are actually characteristics of typical public or typical private organizations is complex. However, with at least two factors being the same, the external environmental factors that influence the healthcare organization in both sectors are the demand for quality care and the National Health Care Reform, which is aimed at trying to improve the health of the nation. Thus, it can be concluded that the organizational goal for this matter for both sectors can be the same goal. In order to achieve quality improvement, the transactional leadership behaviors (producer and director role) perceived by subordinates leads to the development of a learning organization. In addition, hypothesis 1.1 (research question One: chief executive's perception) and hypothesis 2.1 (research question Two: subordinates' perception) have a similar impact on the development of a learning organization.

Regarding path 2(1), the finding supports the idea of a negative zone of leadership role as presented by Quinn, et al. (2003: 20-22). The last form of learning organization showed that the more the broker role increases, the lower the level of development of a learning organization becomes. When leaders in the broker role over- emphasize building and maintaining a power base, negotiating agreement and

commitment, and presenting ideas, the effective broker role has a negative impact on subordinates, eventually on the organization. Subordinates perceive these competencies as political expediency and unprincipled opportunism. Finally, the broker role will be seen as an overly aspiring leader who disrupts continuity in an organization. Therefore, it can be concluded that broker role will not enhance the level of a learning organization because it is a barrier to building a shared vision/mission, organizational strategy, job structure and system, knowledge system, and individual and team development.

5.4.2.5 Hypothesis 2.2 and hypothesis 2.3 **(*public hospital*)** were investigated and analyzed together. The second pattern of the learning organization model found from hypothesis 2.2 and 2.3 indicates that there are twelve paths with positive effects and twenty paths with negative effects on the development of a learning organization in public hospitals. In sum, there are thirty-two forms of development of learning organizations as follows:

1) The paths with positive effects on the development of a learning organization are:

(1) Mentor role⟶ achievement-oriented culture ⟶ learning organization.

(2) Mentor role⟶ achievement-oriented culture⟶ supportive-oriented culture ⟶ learning organization.

(3) Mentor role ⟶achievement-oriented culture⟶ role-oriented culture⟶ learning organization.

(4) Coordinator role⟶ achievement-oriented culture ⟶ learning organization.

(5) Coordinator role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ learning organization.

(6) Coordinator role⟶ achievement-oriented culture⟶ role-oriented culture⟶ learning organization.

(7) Director role⟶ achievement-oriented culture ⟶learning organization.

(8) Director role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ learning organization.

(9) Director role⟶ achievement-oriented culture⟶ role-oriented culture⟶ learning organization.

(10) Director role⟶ supportive-oriented culture⟶ learning organization.

(11) Director role⟶ role-oriented culture⟶ learning organization.

(12) Monitor role⟶ role-oriented culture⟶ learning organization.

2) The paths with negative effects on the development of a learning organization are:

(1) Mentor role⟶ achievement-oriented culture⟶ power-oriented culture⟶learning organization.

(2) Mentor role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ role-oriented culture⟶ learning organization

(3) Mentor role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ power-oriented culture⟶ learning organization

(4) Producer role⟶ achievement-oriented culture⟶ learning organization.

(5) Producer role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶learning organization.

(6) Producer role⟶ achievement-oriented culture⟶ role-oriented culture⟶learning organization.

(7) Producer role⟶ achievement-oriented culture⟶ power-oriented culture⟶learning organization.

(8) Producer role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ role-oriented culture⟶learning organization.

(9) Producer role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ power-oriented culture⟶learning organization

(10) Coordinator role⟶ achievement-oriented culture⟶ power-oriented culture⟶learning organization.

(11) Coordinator role⟶ achievement-oriented culture⟶supportive-oriented culture⟶ role-oriented culture⟶learning organization.

(12) Coordinator role⟶ achievement-oriented culture⟶supportive-oriented culture⟶ power-oriented culture⟶learning organization

(13) Director role⟶ achievement-oriented culture⟶ power-oriented culture⟶learning organization.

(14) Director role⟶ achievement-oriented culture⟶ supportive-oriented culture⟶ role-oriented culture⟶learning organization.

(15) Director role ⟶achievement-oriented culture⟶ supportive-oriented culture⟶ power-oriented culture⟶learning organization

(16) Director role⟶ supportive-oriented culture⟶ role-oriented culture⟶learning organization.

(17) Director role ⟶supportive-oriented culture⟶ role-oriented-culture⟶ power-oriented culture⟶learning organization.

(18) Director role →supportive-oriented culture⟶ role-oriented culture⟶learning organization.

(19) Monitor role⟶ role-oriented culture⟶ power-oriented culture⟶learning organization.

(20) Director role ⟶ role-oriented culture⟶ power-oriented culture⟶learning organization.

With reference to path 1(1), 1(2), and 1(3), transformational leadership behavior (the mentor role) has a direct effect on the development of a learning organization via an achievement-oriented culture, a direct effect on the development of learning organization via an achievement-oriented culture and supportive-oriented culture, and a direct effect on the development of learning organization via an achievement-oriented culture and role-oriented culture. Quinn, et al. (2003: 29-48) said the mentor role might also be called the concerned human role. This role reflects a caring, empathetic orientation. In this role, a leader is expected to be helpful, considerate, sensitive, approachable, open and fair. Employees are seen as important resources to be understood, valued, and developed. The mentor role recognizes that commitment, cohesion, and morale are important indicators of effectiveness. The mentor or coach uses two approaches to developing employees. The first, delegation, focuses on how to develop employees' competencies and abilities by providing them opportunities to take on more responsibility. The second, performance evaluation, focuses on giving employees feedback on their performance. These characteristics of the mentor role can influence their subordinates' commitment to achieve organizational change. Finally, it creates the development of a learning organization.

With regard to path 1(4), 1(5), and 1(6), the director role in public hospitals is viewed as transactional leadership behavior focusing on three competencies: developing and communicating a vision, setting goals and objectives, and designing and organizing. In regards to quality improvement with hospital accreditation in either private or public hospitals, they have similar organizational goals and objectives, that is, quality of care and cost effectiveness. Thus, the chief

executive adopts the director role as having the potential capacity to influence the development of a learning organization, the same as the private hospital does.

In reference to path 1(7), 1(8), 1(9), 1(10), and 1(11), the coordinator role in public hospitals is viewed as transactional leadership behavior in the internal process model, by which the chief executives focus on three competencies: managing the project, designing work such as job rotation, self-managed work teams, knowledge management, and managing across functional team. Although the public hospital is classified as a bureaucratic organization, the structure of a public hospital is viewed as a professional bureaucracy. The professional bureaucracy, thus, relies on coordination and on the standardization of skills and knowledge as well as association with various subunits. In this organizational structure design, there is the tendency for subunit conflicts to develop (Robbins, 1990: 291). In addition, the reason and explanation of the coordinator role related to the learning organization and an organizational culture are as same as the reason and explanation of private hospitals.

In regards to path 1(12), the monitor role in public hospitals is viewed as the monitoring or controlling of behaviors that may sound like a controlling and nosy activity, but monitoring is essential to maintain high performance in both individuals and groups. Quinn, et al. (2003: 105) explained that the core competencies of the skilled monitor are managing information through critical thinking, managing information overload, and managing core processes. Hoouberg and Choi (2001: 410) believed that the public sector tends to be more concerned about compliance with rules and regulations. The public sector leaders, thus, tend to be very concerned about the processes and procedures used to achieve outcomes, taking into consideration which rules and regulations to monitor most closely. In doing so, the managerial behaviors influence the development of a learning organization via a role-oriented culture. As a result, in the organization that values a role-oriented culture, the subordinates are orderly, dependable, rational, and consistent.

However, the findings of the paths with negative effects on a learning organization (hypothesis 2.2 and 2.3: public hospital) also indicated a negative influence of a supportive-oriented culture on role-oriented culture. It indicates that the contradiction between the supportive-oriented culture and the role-oriented culture can be obviously seen in the public hospitals. Thus, the effect of both cultures does

not influence organizational members towards a learning culture or to develop a learning organization. When the supportive-oriented culture predominates, it slows the decision- making process, suppresses conflict among subordinates, and tends to put the individuals' needs over the needs of the organization. Thus, subordinates in the supportive-oriented hospital are not strongly task-oriented and may not deal with the conflict. In this regard, they will not follow a well-designed system and structure, which is a feature in the role-oriented organization. In conclusion, the paths 2(1) – 2(20) of the development of learning organizations in public hospitals, which have both supportive-oriented culture and role-oriented culture in place, do not develop the attributes of a learning organization.

5.4.2.6 Implications for Public Hospitals

The transactional leadership behaviors (the producer and director role) are recommended for the development of learning organizations, if the organizational climate of employees providing reciprocal assistance, exhibiting commitment towards the organizational vision and mission, and having openness and trust is not realized. However, the subordinate' perception and chief executive's perception have a similar agreement on the development of a learning organization without realization of organizational culture with the producer role.

The implications to develop a sustainable learning organization in this sector are that the chief executives need to perform their leadership behaviors with a coordinator role, director role, or mentor role as well as build a current organizational culture with an achievement-oriented culture as priority, and supportive-oriented culture or role-oriented culture in order to create the sustainable learning organization. However, the transactional leadership behavior (the producer role) with a negative zone should be avoided because it inhibits an achievement-oriented culture.

Although the director role has a positive effect and a negative effect on the development of a learning organization, the director role in public hospitals still plays an important role to influence the development of a learning organization with total effect = .31.

The achievement-oriented culture had a direct effect on the development of a learning organization; it is the most important contributing factor for public hospitals with a total effect = .44, because it is a starting point that

influences the learning organization via supportive or role-oriented cultures. Therefore, without an achievement-oriented culture, the development of a learning organization will not exist. Finally, the more the level of power-oriented culture increases, the more the level of development of a learning organization deteriorates. Thus, this kind of culture should be avoided.

5.5 Further Findings from the Learning Organization Model

Regarding the causal model of learning organization both in private and public hospital, both models showed the interrelationship between the four types of current organizational culture. These organizational culture roles can predict the development of a learning organization at p-value of .05. This research study revealed that the development of a learning organization in private and public hospitals was influenced by an achievement-oriented culture directly through a supportive-oriented culture. At the same time, the learning organization was also influenced by an achievement-oriented culture directly through a role-oriented culture. Inconsistently, the supportive-oriented culture has a direct effect on a role-oriented culture with a negative impact on the development of a learning organization in both sectors. This finding means the higher the level of support that exists in an organization, the lower the level of a role-oriented culture becomes. Furthermore, this research study found that the development of a learning organization in public hospitals was directly positively influenced by an achievement-oriented culture, while a power-oriented culture directly negatively influenced the development of a learning organization. Thus, it is concluded that the development of a learning organization was influenced by the various organizational culture types as perceived by subordinates.

The members in a support-oriented culture support one another in the work and go out of their way to cooperate, Members in this type of culture have good internal communication, a high level of commitment to organizational decisions, high level of cooperation and an efficient group work, and are good at sensing the environment and environmental scanning (Harrison and Strokes, 1992). The finding supports the idea in the learning organization literature that, to become a learning organization, the culture should be a climate of openness, trust, and working together

to support the collective well-being (Bennett and O'Brien, 1994: 41-48). Davies and Nutley (2000) explained that a learning organization requires attention to some key cultural values if it is to be a successful undertaking. Pool (2000) revealed the research results indicate a corporation implementing TQM principles in a supportive organizational culture has a positive and significant relationship with organizational learning compared to those executives not exposed to these constructs. This research study found that a supportive organizational culture will encounter higher levels of organizational learning. Thus, corporations with weak cultures do not have the sense of purpose and direction and are less successful than those with a strong culture. Strong cultures are those that provide the stability and predictability to members of the culture group in order to respond properly to difficult situations. Furthermore, the qualitative data from eight chief executives interviewed also supports the empirical research of the association between types of organizational culture and development of organizational learning (learn how to learn).

The chief executive from Hospital One (a doctor) said that the organizational culture at this hospital helped promote the success of quality improvement.

> "It may be said that when the hospital decides to adopt hospital accreditation and is certified by HAT, organizational culture plays a significant role in pushing the success of quality improvement. It is the quality improvement system that facilitates organizational learning and, at the same time, the acceptance of change enables the staff to accept learning. But the 'leader' is also an important factor for continuous quality improvement."

Doctor B from Hospital Two stated that "the organizational culture in the hospital has been changed to a certain degree e.g. people are willing to learn new things or concepts, then try to apply them to their work through the trial-and-error method. Doctor B further explained, "In the present organizational culture, most people remain doing work and/or applying the concept of quality to their work in order to pursue their responsible duties via essential monitoring systems. However, only a small number of personnel in the organization still hold the culture of commitment to work for quality improvement with whole-hearted willingness, and also feel the need for organizational success."

Doctor H from Hospital Seven said that after implementing HA for a certain time, the organizational culture has apparently been changed at all levels in the organization. He noticed that:

1) The commitment of the leader provides the supporting environment in the organization.

2) When adopting quality improvement through cross-functional teams, there is a change in the way of working. He noticed that there is better coordination, mutual support, and easier acceptance of different ideas.

3) There is more dialogue, learning how to get better coordination, adapting them to change in working styles, and opening their minds.

In sum, to be successful in changing and sustaining quality, the central issue associated with organizational culture is the linkage between the managerial behavior of chief executives and the learning organization; this linkage needs to be recognized.

5.6 Academic Implications

5.6.1 Results from this study indicate that the model of a learning organization in private and public hospitals was developed at least to some degree, if they have been accredited with Hospital Accreditation by HAT. There are no significant differences in the attributes of a learning organization between private and public hospitals.

5.6.2 Since private and public hospitals have undergone the learning process with learning how to implement Hospital Accreditation as well as finally being certified and accredited, the attributes of a learning organization in private and public hospitals include all four important attributes of a learning organization, starting from shared vision/mission & organizational strategy, job structure & system, knowledge system, and performance & development respectively. However, these four important attributes of the learning organization would not exist without the two foundations of appropriate leadership behavior and an organizational culture that supports the development of a learning organization.

First, a learning organization needs to have an organizational culture that impacts and contributes to sustainable long-term organizational learning. Second, a learning organization also needs to be accompanied by top leaders. If organizations are asked to learn, develop and utilize knowledge as a way to embrace change and to innovate, to solve problems and to accomplish tasks, there must be a catalyst to stimulate a learning environment. Senge (1990, 1999) suggests leadership has a vital role to play in creating these conditions.

Senge, et al. (1999) claims that the quality movement was the first wave in building learning organizations, that is, organizations which continually expand their ability to shape their own futures. The research findings indicate that the attributes of a learning organization exist as an output of effectively implemented HA programs. Moreover, the researcher takes the view that a HA initiative may only be considered successful if a new working environment has been created, in which people are able to share learned knowledge and make worthwhile contributions. There is further evidence that attributes of a learning organization has been an outcome of the journey towards quality improvement both private and public hospitals.

5.6.3 The leadership behavior in private hospitals employs transactional leadership behavior (the coordinator role), whilst the leadership behavior in public hospital utilizes both transformational leadership behaviors (mentor role) and transactional leadership behaviors (the director, monitor, and coordinator role). These leadership behaviors positively influence a current organizational culture, and leadership behaviors and organizational culture collectively contribute to develop the attributes of a learning organization (Thai context) both in private and public hospitals. The present study's findings suggest that both transactional and transformational leadership have affects on the development of a learning organization. Therefore, the assumption from the reviewed literature (Feigenbaum, 1993; Belasen, et al., 1996; Coad and Berry, 1998; Barnsley, Lemieux-Charles and McKinney, 1998 and Ellinger and Bostrom, 2000) that hospital chief executives should shift from traditional management or transactional leadership to transformational leadership may be inappropriate in the Thai context. However, it might indicate that both private and public hospital emphasize the coordinator role

and monitor role because there are times that call for a standard or routine to be maintained for hospital accreditation and continuous quality improvement.

Hart and Quinn (1993: 543-574) found that the ability to play multiple and competing roles produced better organizational performance. Transformational leadership behavior (human relations and open system model) and transactional leadership behavior (rationale goal and internal process model) represent a behavioral complexity needed to be achieved, in which effective leadership must be the ability to both conceive and perform multiple and contradictory roles (Denison, Hooijberg and Quinn, 1995: 525).

Thus, more effective managers and organizations may be able to balance all four models of the above conflicting demands, suggesting that high performance requires the simultaneous mastery of seemingly contradictory or paradoxical capabilities (Hart and Quinn, 1993; Cameron and Quinn, 1999 and Quinn, et al., 2003). Dension, Hooijberg and Quinn (1995: 528) emphasized that the definition of effective leadership implied by the model is not the capacity to be either a monitor or a director or an innovator, but rather to perform all of those roles simultaneously.

Four conclusions can be drawn from the study, in relationship to the theory.

1) The power-oriented culture is an absolutely inappropriate culture to employ to influence an organization's ability to learn and to change, both in private and public hospitals. The power-oriented culture was perceived as prohibitive practices in transforming the "current" organizational culture into a learning culture. Harrison and Strokes (1992: 14) explained that the power-oriented organization tends towards a rule by fear, with abuse of power for personal advantage on the part of the leaders, their friends, and their protégés. The organizational culture with power is driven by a set of behavioral and structural values which were centrally driven; built upon and controlled by coercive power and decisively implemented from the center (McKenna, 1992: 26).

2) Two patterns of organizational culture were perceived as contributing to a learning culture for both private and public hospitals: 1) achievement-oriented cultures and supportive-oriented, and 2) achievement-oriented cultures and role-oriented culture; these cultures encourage both individual and team level learning (acquisition), shared information, and incorporating the knowledge into

working processes. Harrison and Strokes (1992: 23-24) said, “The emphasis of working to improve systems and procedures such as total quality management and hospital accreditation is on making systems more responsive to the needs of the task (Achievement) and the people (Support) who work in the hospitals.” Thus, the achievement and support culture require a fairly high degree of openness and trust to flourish. The new approaches to management such as total quality management or hospital accreditation attempt to blend the role orientation’s emphasis on well designed and closely managed systems with the empowerment of employee involvement that is typical of the achievement culture.

3) The results of the study supports the researcher’s underlying belief that learning organizational attributes can be demonstrated in more than one type of organizational culture and that transformations in organizational cultures can create learning organization attributes as well. Therefore, achievement-oriented culture, supportive-oriented culture and role-oriented culture can be established as learning cultures that influence the overall attributes of a learning organization present in private and public hospitals.

4) Organizational culture is viewed as a key mediating construct in the model of a learning organization. All the effects of leadership behavior are mediated by organizational culture. Thus, the findings suggest that leadership behavior influences the organizational culture and is deemed an appropriate starting point in the casual relationship model. It confirms a theoretical model claiming that subordinates of both sectors see causality between leadership behaviors, a current organizational culture, and a learning organization.

5.7 Practical Implications

The results of the study also point to two important practical implications. The direct effect of leadership behaviors on the development of a learning organization through a current organization culture has implications for leadership training programs. First, the training program for leaders should be in organizational culture management. The learning organization model from this research study shows, for example that in both private and public hospitals, a current organizational culture with

a predominance of achievement-oriented culture and supportive-oriented culture or a predominance of achievement-oriented culture and role-oriented culture should be built first. The development of a learning organization, thus, will follow. Therefore, the development of a learning organization gained from learning how to implement quality improvement will be not sustained, unless the culture of the hospital changes. The culture change process recommended for hospitals includes: 1) effective organizational culture change must begin with changing mindsets, for example a mindset change from the top management and then cascaded down to the lower level staff; 2) organizational culture should be aligned to the hospital's vision, mission, strategies, goals and the external environment; 3) to achieve credibility and win commitment of staff, policies, procedures and practices must be consistent with the new culture; 4) to overcome the resistance, hospital's policies should stress that by developing such a culture, it will enhance the competency of individuals, help employees market value in terms of knowledge, skills and experience; 5) hospitals should utilize every channel of communication and every opportunity to promote and communicate the new belief system, core values and desired patterns of behavior to every level of staff from the top right down to the lowest level of staff by using formal and informal channels of communication; 6) to achieve deep and sustainable culture change requires a participative approach by getting people's involvement through culture promotion activities such as a slogan; and 7) a new organizational culture such as achievement-oriented and supportive-oriented culture requires the commitment of top management. Commitment here refers to not only the initial launching but the continued support and follow-up. Support is needed to change policies and systems to align to the new culture.

The second implication of this study is the necessity for a leadership training and development program. Leadership training programs for chief executives of private hospitals should emphasize the coordinator role as a key leadership attribute might find useful application in the private hospitals in order to sustain the development of a learning organization. The chief executives may need to develop a greater understanding of the coordinator role and should be encouraged to increase their comfort in using the coordinator role and skills in leading their organizations. In order achieve an organizational effectiveness, the leadership training program should

develop leaders with the capacity to play and integrate competing roles, in particular, the monitor, innovator, and broker role. When managerial leaders become too focused on the internal processes of sustained hospital accreditation, they lose awareness of the organization's environment and are not able to help the hospital adapt when changes in the external environment require new internal processes. Thus, the chief executive needs to develop and utilize these four leadership behaviors with appropriate balance.

For the chief executives in public hospitals, a leadership training program intended to develop leaders' behavioral complexity and versatility might be an advantage. The chief executives may need to develop a greater understanding of the mentor, coordinator, and director role and should be encouraged to increase their comfort in using these roles and skills in leading their organizations. For the leaders in public hospitals to be more effective, the mentor role (human relation model), director role (rational goal model), and coordinator role (internal process model) should develop concurrently and employ and balance these four roles appropriately.

5.8 Recommendations For Future Research

The results of the findings provide several directions for future research and practice. The results confirm the predictive value of the leadership behavior role and organizational culture type to develop learning organizations in hospitals certified and accredited by HAT. The current findings increase the understanding of the effects of transformational and transactional leadership behaviors (eight roles of leadership behavior) and type of organizational culture on the development of learning organization. Thus, based on the literature review and findings of the study, the following recommendations are proposed:

5.8.1 The study failed to measure a current organizational culture as perceived by chief executives. Thus, measuring and analyzing the covariance between the roles of leadership behaviors, types of a current organization, and the learning organization from the perspective of leaders was impossible. Although the researcher conducted semi-structured interviews with the leaders, the findings of the three variables with

regard to whether or not, from the leaders' perspective, are interrelated could not be determined. A suggestion would be to replicate the study but also include the measurement of a current organizational culture as perceived by the leaders. Thus, the replicated study will be able to compare and confirm two causal models of the learning organization between leader's perception and subordinate's perception. In this regard, the results of the future study will show whether or not there is a discrepancy between them.

5.8.2 The model of a learning organization developed through the concept of Bennett and O'Brien, (1994: 41-48) provides an empirically validated, (at least initially) model. Future studies should be conducted to increase the generalizabity of the findings. Specifically, research needs to be performed in hospitals accredited and certified by TQM or ISO 9002 version 2000, or in other types of organizations. Replication of this study in other organizations would be useful.

5.8.3 The number of hospitals and the population of the study is only a small number of the hospitals accredited and certified with HA. Thus, the unit of analysis was necessarily an individual's perception. However, the number of hospitals is increased dramatically, as is the number accredited and certified by HA. The replication of the study using other organizations as a unit of analysis will gain insight the different perspectives and results of three variables.

5.8.4 Almost all the hospitals in the study had recently undertaken Hospital Accreditation, which is by nature a learning process that would, at least temporarily, foster a learning environment. The true learning organization is one that sustains this environment. Therefore a follow-up study after several years of HA would indicate whether or not the attributes of a learning organization have been sustained in these hospitals.

5.8.5 The results of this study point to the evolution of a new culture beyond the four traditional cultures (achievement- oriented, power-oriented, supportive, and role-oriented). This culture could be termed "learning culture", which is unique to

learning organizations. Further studies could examine and develop this concept as a contribution to the body of knowledge on organizational cultures.

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APPENDIX A

Cover Letter, Leadership Behaviors, Learning Organization and Organizational Culture Instrument

COVER LETTER

18/5 Soi. Wattanawong, Ratcha Parob Road
Ratcha Tevee Bangkok, 10400

April 1, 2003

Re: Information Enquiry
To: Dear Respondent
The attached document: Questionnaire

Dear Sir/Madam

I am a doctorate student at National Institute of Development Administration, School of Public Administration. I am now conducting research in the topic of Effects of Leadership Behaviors and Organizational Culture on The Development of Learning Organization: Case Study of Private and Public Hospitals with Hospital Accreditation. The purpose of my study is to understand the relationship among eight roles of transformational and transactional leadership behaviors, four types of a current organizational culture, and the development of the learning organization in both private and public hospitals that have been certified and accredited with HA

The questionnaire consists of three sections. There are 1) the leadership behaviors; 2) the organizational culture; and 3) the learning organization.

I would be most grateful if you could complete the attached questionnaire, put it in the provided enveloped, and return it to your coordinator at your organization before April 30, 2003. Thank you for taking the time to complete the questionnaire.

Respectfully yours,

(Ms. Sirirat Chamnannarongsak)

ความเป็นผู้นำในการปฏิรูปและการดำเนินการ

แบบฟอร์มประเมินตนเอง

แบบสอบถามนี้จัดทำขึ้นโดยมีวัตถุประสงค์เพื่อบรรยายลักษณะและบทบาทความเป็นผู้นำของท่านในมุมมองของท่านเอง โปรดตอบคำถามทั้งหมดจำนวน 46 ข้อในแผ่นคำตอบนี้ โดยเลือกความถี่ที่เหมาะสมกับตัวท่าน

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
1 .ข้าพเจ้ายกย่องชมเชยผู้ใต้บังคับบัญชาในเรื่องผลงานและความคิดของเขา					
2. ข้าพเจ้ามีทัศนคติที่เปิดกว้าง เป็นมิตรและเข้าใจผู้ใต้บังคับบัญชา					
3. ข้าพเจ้าแนะนำให้ผู้ใต้บังคับบัญชาเข้าร่วมในกิจกรรมที่ช่วยพัฒนาวิชาชีพในฐานะที่เป็นส่วนหนึ่งของงานและแนะนำให้พวกเขามีการเรียนรู้ด้วยการปฏิบัติจริง					
4. ข้าพเจ้าให้โอกาสผู้ใต้บังคับบัญชาได้ประยุกต์ใช้ความรู้และทักษะใหม่ๆ จากสิ่งที่เขาได้เรียนรู้มาจากการฝึกอบรม / กิจกรรมการพัฒนา					
5. ข้าพเจ้าจัดสรรงบประมาณสำหรับงานที่สนับสนุนการเรียนรู้และการถ่ายโอนองค์ความรู้					
6. ข้าพเจ้าปูลกฝังให้ผู้ใต้บังคับบัญชามีความเชื่อมั่นในแนวคิดการทำงานเป็นทีมแบบสหวิชาชีพและการทำงานแบบคร่อมสายงาน					
7. ข้าพเจ้าช่วยเหลือผู้ใต้บังคับบัญชาในการแก้ไขปัญหาความขัดแย้ง					
8. ข้าพเจ้าส่งเสริมให้ผู้ใต้บังคับบัญชามีส่วนร่วมในการแก้ไขปัญหาและส่งเสริมบรรยากาศการทำงานที่สามัคคี					
9. ข้าพเจ้าสนับสนุนให้ผู้ใต้บังคับบัญชามีส่วนร่วมในการอภิปรายประเด็นต่างๆ เกี่ยวกับงาน					
10.ข้าพเจ้าส่งเสริมให้ผู้ใต้บังคับบัญชามีส่วนร่วมในการตัดสินใจของกลุ่ม					
11. ข้าพเจ้าอำนวยความสะดวกและเป็นผู้นำในการประชุมกลุ่มอย่างมีประสิทธิภาพ					
12. ข้าพเจ้าแก้ไขปัญหาร่วมกับกลุ่มจนสำเร็จลุล่วงโดยการพูดคุยจนเข้าใจ					
13. ข้าพเจ้ากระตุ้นให้ผู้ใต้บังคับบัญชาลองใช้วิธีปฏิบัติงานแบบใหม่ๆ และทำให้พวกเขาเต็มใจที่จะเปลี่ยนแปลงวิธีปฏิบัติงานด้วยความเข้าใจ					
14. ข้าพเจ้าได้ตั้งความคาดหวังเกี่ยวกับองค์กรและได้สื่อสารให้ผู้ใต้บังคับบัญชาทราบโดยใส่ไว้ในวิสัยทัศน์/พันธกิจขององค์กร					
15. ข้าพเจ้าใช้ทักษะการบริหารทรัพยากรมนุษย์และความสามารถในการบริหารงานร่วมกับทีมงานเพื่อให้ภารกิจประสบความสำเร็จ					
16. ข้าพเจ้ากระจายอำนาจในการตัดสินใจให้แก่ทีมงาน					

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
17. ข้าพเจ้าจัดทำระบบการเรียนรู้ เพื่อให้ผู้ใต้บังคับบัญชาทราบถึงความมุ่งมั่นขององค์กรในการส่งเสริมการเรียนรู้ของบุคลากร					
18. ข้าพเจ้าจัดให้มีการฝึกอบรมที่เหมาะสมเพื่อพัฒนาความรู้และทักษะของผู้ใต้บังคับบัญชา					
19.ข้าพเจ้าแจ้งผลการประเมิน ให้ผู้ใต้บังคับบัญชาทราบและให้ความสำคัญในความคิดเห็นของผู้ใต้บังคับบัญชา					
20. ข้าพเจ้ามีแนวความคิดในการพัฒนาองค์กร					
21. ข้าพเจ้าคิดค้นวิธีการใหม่ๆ ในการพัฒนากระบวนการและขั้นตอนการทำงาน					
22. ข้าพเจ้าเปลี่ยนปัญหาให้เป็นโอกาส					
23. ข้าพเจ้าช่วยเหลือผู้ใต้บังคับบัญชาเป็นการส่วนตัวในการปรับตัวให้เข้ากับการเปลี่ยนแปลงในองค์กร					
24. ข้าพเจ้าส่งเสริมผู้ใต้บังคับบัญชาให้เกิดความคิดริเริ่มสร้างสรรค์					
25. ข้าพเจ้าช่วยเหลือผู้ใต้บังคับบัญชาในการแก้ไขปัญหาที่มีความคลุมเครือและความล่าช้า					
26. ข้าพเจ้าประเมินผลกระทบที่อาจเกิดขึ้นได้จากการเปลี่ยนแปลงที่นำเสนอ					
27. ข้าพเจ้าช่วยให้ผู้ใต้บังคับบัญชาเห็นถึงข้อดีของการเปลี่ยนแปลงใหม่ๆ ในองค์กรและนอกองค์กร					
28. รู้จักใช้ความรู้ ความสามารถและความเต็มใจของผู้ใต้บังคับบัญชาให้เป็นประโยชน์ต่อการเปลี่ยนแปลง					
29. ข้าพเจ้าสนับสนุนให้ผู้ใต้บังคับบัญชากล้าที่จะดำเนินการในสิ่งที่มีความเสี่ยงและลงมือดำเนินการให้เกิดผลแทนที่จะรีรอ					
30. ข้าพเจ้าสร้างแนวร่วมและเครือข่ายระหว่างเพื่อนร่วมงานและแผนกต่างๆ					
31. ข้าพเจ้าธำรงรักษาการติดต่อกับบุคคลภายนอกให้มีความสัมพันธ์อันดี					
32. ข้าพเจ้านำเสนอแนวคิดในการพัฒนาหน่วยงานต่อผู้บริหารในระดับสูงกว่า และต่อหน่วยงานอื่นๆในองค์กร ซึ่งก่อให้เกิดผลการเปลี่ยนแปลงต่อองค์กรทั้งในระดับราบ และแนวดิ่ง					
33. ข้าพเจ้าเป็นผู้นำเสนอหน่วยงานให้ผู้รับบริการและลูกค้าได้รู้จัก					
34. ข้าพเจ้าได้แสดงให้เห็นว่าเป็นผู้ที่เชี่ยวชาญในการสื่อสารและเป็นผู้ฟังที่ดี					
35. ข้าพเจ้าตื่นตัวอยู่เสมอในการที่จะสร้างแรงจูงใจให้ผู้ใต้บังคับบัญชาปฏิบัติงานให้บรรลุผลสำเร็จ					

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
36. ข้าพเจ้ากำหนดความคาดหวังต่อการปฏิบัติงานให้เกิดขึ้นในตัวของผู้ใต้บังคับบัญชา และเน้นที่ผลงานเป็นหลัก					
37.ข้าพเจ้าเน้นที่ความสำเร็จลุล่วงของภารกิจของหน่วยงานเป็นอันดับแรก					
38. ข้าพเจ้าตรวจสอบให้แน่ใจว่าผู้ทำงานได้กำหนดเป้าหมายที่ชัดเจน จัดทำแผน และกำหนดเกณฑ์การวัด (milestone) ที่ถูกต้องสำหรับโครงการที่ข้าพเจ้าเป็นผู้รับผิดชอบ					
39. ข้าพเจ้าเรียงลำดับความสำคัญก่อนหลังของเป้าหมายต่างๆ อย่างชัดเจน					
40. ข้าพเจ้ากำหนดบริบทของงานที่จะต้องทำและผลลัพธ์ที่จะต้องบรรลุ					
41. ข้าพเจ้าจัดสรรทรัพยากรใหม่อย่างเหมาะสมสำหรับการเปลี่ยนแปลงที่จำเป็นในสายงาน					
42. ข้าพเจ้าตรวจสอบให้แน่ใจว่าการปฏิบัติงานดำเนินไปโดยมีความขัดแย้งน้อยที่สุดระหว่างบุคคล ทีมงาน หรือระหว่างหน่วยงาน					
43. ข้าพเจ้าสร้างและดูแลรักษาช่องทางการสื่อสารที่จำเป็นในหน่วยงานและแผนกต่างๆ					
44. ข้าพเจ้าจัดระบบข้อมูลข่าวสารให้อยู่ในรูปแบบที่นำไปสู่การตัดสินใจอย่างมีประสิทธิภาพ					
45. ข้าพเจ้าเผยแพร่ข้อมูลข่าวสารเกี่ยวกับการเปลี่ยนแปลงนโยบายและขั้นตอนการทำงาน					
46. ข้าพเจ้าควบคุมดูแลให้สมาชิกในทีมงานปฏิบัติตามกฎและข้อกำหนดขององค์กร					

Transformational and Transactional Leadership

Self-Rater Form

This questionnaire is to describe your leadership style as you perceive it. Please answer all items on this answer sheet. Forty-six descriptive statements are listed on the following pages. Judge how frequently each statement fits you.

Use the following rating scale: **1 = not at all**

2 = once in a while

3= sometimes

4 = fairly often

5 = frequently, if not always

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
1. I give credit to subordinates for their works and ideas.					
2. I maintain an open, approachable and understanding attitude toward subordinates.					
3. I advise subordinates to participate in professional development activities as part of our jobs and to learn by doing.					
4. I provide opportunities to subordinates to apply new knowledge and skills from what I have learned in development or training programs.					
5. I establish a budget for practices that support learning and knowledge transfer.					
6. I foster a sense of cross-organizational and multidisciplinary teamwork among subordinates.					
7. I help subordinates to resolve their conflicts.					

Question	not at all	once in a while	Some-times	fairly often	frequently, if not always
8. I enhance subordinates' participation and a cohesive work climate.					
9. I involve subordinates in discussion over work matters.					
10. I encourage subordinates to participate in group decisions.					
11. I facilitate and lead group meetings effectively.					
12. I work problems out together by talking it through.					
13. I stimulate subordinates to try new practices and initiate them to have a willingness to change own practices in light of new understanding.					
14. I set and communicate organizational expectations that fit into its mission.					
15. I use human resource skills and am able to accomplish tasks with teamwork.					
16. I decentralize decision-making.					
17. I set up a learning system in order to show the organization's commitment to employees' learning.					
18. I provide adequate training to develop subordinates' knowledge and skills.					
19. I provide feedback to subordinates and solicit feedback from subordinates.					
20. I come up with ideas for improving the organization.					
21. I look for innovative ways to improve work processes and procedures.					
22. I turn problems into opportunities.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
23. I personally help subordinates to adjust to changes in the organization.					
24. I encourage creativity among subordinates.					
25. I help subordinates to deal with ambiguity and delay.					
26. I evaluate the potential impact of proposed changes.					
27. I help subordinates to see the positive aspects of new changes in and outside the organization.					
28. I utilize subordinates' skills, knowledge and willingness to innovate changes.					
29. I encourage subordinates to exhibit risk-taking behavior and act proactively.					
30. I build coalitions and networks among peers and department.					
31. I nurture contacts with people external to the organization.					
32. I present ideas to managers at higher levels; represent the unit to others in the organization; exert lateral and upward influence in the organization.					
33. I represent the unit to clients and customers.					
34. I demonstrate the qualities of a skilled communicator and listener.					
35. I maintain a high level of energy in motivating subordinates to reach productive accomplishment.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
36. I create high performance expectations in subordinates, focusing on results.					
37. I emphasize the completion of the group's task as a priority.					
38. I make sure the work group sets clear goals, makes plans, and establishes milestones for the projects he/or she leads.					
39. I assign clear priorities among multiple goals.					
40. I set a context of the work to be done and the outcomes to be achieved.					
41. I reallocate resources to accommodate necessary changes in workflow.					
42. I make sure work activities are carried out with a minimum amount of conflict among individuals, work teams, or work units.					
43. I set up and maintain necessary communication channels through unit / department.					
44. I organize information into a form that leads to effective decision-making.					
45. I disseminate information regarding changes in policies and procedures.					
46. I supervise team members complying with rules and meeting requirements.					

สอบถามเกี่ยวกับความเป็นผู้นำในการปฏิรูปและการดำเนินการ

แบบฟอร์มการประเมินผู้บริหาร

แบบสอบถามฉบับนี้จัดทำขึ้นโดยมีวัตถุประสงค์เพื่อบรรยายลักษณะและบทบาทความเป็นผู้นำของผู้บริหาร ที่ท่านอยู่ในสายบังคับบัญชาโดยตรง ในมุมมองของท่านเอง โปรดตอบคำถามทั้งหมดจำนวน 46 ข้อในแผ่นคำตอบนี้ โดยเลือกคำตอบตามความถี่ของแต่ละสถานการณ์ที่เหมาะสมกับมุมมองของท่าน

ผู้บริหารที่ข้าพเจ้ากำลังประเมินเป็นบุคคลที่มีลักษณะและบทบาท...

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
1.ยกย่องชมเชยข้าพเจ้าในเรื่องผลงานและความคิด					
2. มีทัศนคติที่เปิดกว้าง เป็นมิตรและเข้าใจข้าพเจ้า					
3. แนะนำให้ข้าพเจ้าเข้าร่วมในกิจกรรมที่ช่วยพัฒนาวิชาชีพ ในฐานะที่เป็นส่วนหนึ่งของงานและแนะนำให้ข้าพเจ้ามีการเรียนรู้ ด้วยการปฏิบัติจริง					
4. ให้โอกาสข้าพเจ้าได้ประยุกต์ใช้ความรู้และทักษะใหม่ๆ จากสิ่งที่ข้าพเจ้าได้เรียนรู้มาจากการฝึกอบรม/กิจกรรมการพัฒนา					
5. จัดสรรงบประมาณสำหรับงานที่สนับสนุนการเรียนรู้และการถ่ายโอนองค์ความรู้					
6. ปลูกฝังให้ข้าพเจ้ามีความเชื่อมั่นในแนวคิดการทำงานเป็นทีมแบบสหวิชาชีพและการทำงานแบบคร่อมสายงาน					
7. ช่วยเหลือข้าพเจ้าในการแก้ไขปัญหาความขัดแย้ง					
8. ส่งเสริมให้ข้าพเจ้ามีส่วนร่วมในการแก้ไขปัญหาและส่งเสริมบรรยากาศการทำงานที่สามัคคี					
9. สนับสนุนให้ข้าพเจ้ามีส่วนร่วมในการอภิปรายประเด็นต่างๆ เกี่ยวกับงาน					
10.ส่งเสริมให้ข้าพเจ้ามีส่วนร่วมในการตัดสินใจของกลุ่ม					
11. อำนวยความสะดวกและเป็นผู้นำในการประชุมกลุ่มอย่างมีประสิทธิภาพ					
12. แก้ไขปัญหาร่วมกับกลุ่มจนสำเร็จลุล่วงโดยการพูดคุยจนเข้าใจ					
13. กระตุ้นให้ข้าพเจ้าลองใช้วิธีปฏิบัติงานแบบใหม่ๆ และทำให้ข้าพเจ้าเต็มใจที่จะเปลี่ยนแปลงวิธีปฏิบัติงานด้วยความเข้าใจ					
14. ตั้งความคาดหวังเกี่ยวกับองค์กรและได้สื่อสารให้ข้าพเจ้าทราบโดยใส่ไว้ในวิสัยทัศน์/พันธกิจขององค์กร					
15. ใช้ทักษะการบริหารทรัพยากรมนุษย์และความสามารถในการบริหารงานร่วมกับทีมงานเพื่อให้ภารกิจประสบความสำเร็จ					
16. กระจายอำนาจในการตัดสินใจให้แก่ทีมงาน					

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
17. จัดทำระบบการเรียนรู้ เพื่อให้ข้าพเจ้าทราบถึงความมุ่งมั่นขององค์กรในการส่งเสริมการเรียนรู้ของบุคลากร					
18. จัดให้มีการฝึกอบรมที่เหมาะสมเพื่อพัฒนาความรู้และทักษะของข้าพเจ้า					
19. แจ้งผลการประเมิน ให้ข้าพเจ้าทราบและให้ความสำคัญในความคิดเห็นของข้าพเจ้า					
20. มีแนวความคิดในการพัฒนาองค์กร					
21. คิดค้นวิธีการใหม่ๆ ในการพัฒนากระบวนการและขั้นตอนการทำงาน					
22. เปลี่ยนปัญหาให้เป็นโอกาส					
23. ช่วยเหลือข้าพเจ้าเป็นการส่วนตัวในการปรับตัวให้เข้ากับการเปลี่ยนแปลงในองค์กร					
24. ส่งเสริมข้าพเจ้าให้เกิดความคิดริเริ่มสร้างสรรค์					
25. ช่วยเหลือข้าพเจ้าในการแก้ไขปัญหาที่มีความคลุมเครือและความล่าช้า					
26. ประเมินผลกระทบที่อาจเกิดขึ้นได้จากการเปลี่ยนแปลงที่นำเสนอ					
27. ช่วยให้ข้าพเจ้าเห็นถึงข้อดีของการเปลี่ยนแปลงใหม่ๆในทั้งองค์กรและนอกองค์กร					
28. รู้จักใช้ความรู้ ความสามารถและความเต็มใจของข้าพเจ้าให้เป็นประโยชน์ต่อการเปลี่ยนแปลง					
29. สนับสนุนให้ข้าพเจ้ากล้าที่จะดำเนินการในสิ่งที่มีความเสี่ยงและลงมือดำเนินการให้เกิดผลแทนที่จะรีรอ					
30. สร้างแนวร่วมและเครือข่ายระหว่างเพื่อนร่วมงานและแผนกต่างๆ					
31. ธำรงรักษาการติดต่อกับบุคคลภายนอกให้มีความสัมพันธ์อันดี					
32. นำเสนอแนวคิดในการพัฒนาหน่วยงานต่อผู้บริหารในระดับสูงกว่าและต่อหน่วยงานอื่นๆในองค์กร ซึ่งก่อให้เกิดผลการ เปลี่ยนแปลงต่อองค์กรทั้งในระดับราบและแนวดิ่ง					
33. เป็นผู้นำเสนอหน่วยงานให้ผู้รับบริการและลูกค้าได้รู้จัก					
34. แสดงให้เห็นว่าเป็นผู้ที่เชี่ยวชาญในการสื่อสารและเป็นผู้ฟังที่ดี					
35. มีความกระตือรือร้นอยู่เสมอในการที่จะสร้างแรงจูงใจให้ข้าพเจ้าปฏิบัติงานให้บรรลุผลสำเร็จ					
36. กำหนดความคาดหวังต่อการปฏิบัติงานให้เกิดขึ้นในตัวของข้าพเจ้าและเน้นที่ผลงานเป็นหลัก					
37.เน้นที่ความสำเร็จลุล่วงของภารกิจของหน่วยงานเป็นอันดับแรก					
38. ตรวจสอบให้แน่ใจว่าข้าพเจ้าและผู้ร่วมงานได้กำหนดเป้าหมายที่ชัดเจน จัดทำแผน และกำหนดเกณฑ์การวัด (milestone)ที่ถูกต้องสำหรับโครงการที่ผู้บริหารเป็นผู้รับผิดชอบ					
39. เรียงลำดับความสำคัญก่อนหลังของเป้าหมายต่างๆ อย่างชัดเจน					
40. กำหนดบริบทของงานที่จะต้องทำและผลลัพธ์ที่จะต้องบรรลุ					

คำถาม	ไม่เคย	นานๆ ครั้ง	บางครั้ง	ค่อนข้างบ่อย	บ่อยหรือเกิดขึ้นเสมอ
41. จัดสรรทรัพยากรอย่างเหมาะสมสำหรับการเปลี่ยนแปลงที่จำเป็นในสายงาน					
42. ตรวจสอบให้แน่ใจว่าการปฏิบัติงานดำเนินไปโดยมีความขัดแย้งน้อยที่สุดระหว่างบุคคล ทีมงาน หรือระหว่างหน่วยงาน					
43. สร้างและดูแลรักษาช่องทางการสื่อสารที่จำเป็นในหน่วยงานและแผนกต่างๆ					
44. จัดระบบข้อมูลข่าวสารให้อยู่ในรูปแบบที่นำไปสู่การตัดสินใจอย่างมีประสิทธิภาพ					
45. เผยแพร่ข้อมูลข่าวสารเกี่ยวกับการเปลี่ยนแปลงนโยบายและขั้นตอนการทำงาน					
46. ควบคุมดูแลให้ข้าพเจ้าและสมาชิกในทีมงานปฏิบัติตามกฎและข้อกำหนดขององค์กร					

Transformational and Transactional Leadership

Other-Rater Form

This questionnaire is to describe the leadership style to whom you directly report, as your perceive it. Please answer all items on this answer sheet. Forty-six descriptive statements are listed on the following pages. Judge how frequently each statement fits your perceive.

Use the following rating scale: **1 = not at all**

2 = once in a while

3= sometimes

4 = fairly often

5 = frequently, if not always

THE PERSON I AM RATING……

Question	not at all	once in a while	Some-times	fairly often	frequently, if not always
1. Gives credit to subordinates for their work and ideas.					
2. Maintains an open, approachable and understanding attitude toward subordinates.					
3. Advises me to participate in professional development activities as part of my job and to learn by doing.					
4. Provides opportunities to apply new knowledge and skills from what I have learned in a development or training program.					
5. Establishes a budget for practices that support learning and knowledge transfer.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
6. Fosters a sense of cross-organizational and multidisciplinary teamwork among subordinates.					
7. Helps me to resolve my conflicts.					
8. Enhances my participation and a cohesive work climate.					
9. Involves subordinates in discussion over work matters.					
10. Encourages me to participate in group decisions.					
11. Facilitates and leads group meetings effectively.					
12. Works problems out together by talking it through.					
13. Stimulates me to try new practices and initiates me to have a willingness to change my own practices in light of new understanding.					
14. Sets and communicates organizational expectations that fit into its mission.					
15.Uses human resource skills and is able to accomplish tasks with teamwork.					
16. Decentralizes decision-making.					
17. Sets up learning system in order to show the organization's commitment to employees' learning.					
18. Provides adequate training to develop my knowledge and skills.					
19. Provides feedback to employees and solicits feedback from employees.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
20. Comes up with ideas for improving the organization.					
21. Looks for innovative ways to improve work processes and procedures.					
22. Turns problems into opportunities.					
23. Personally helps me to adjust to changes in the organization.					
24. Encourages creativity among employees.					
25. Helps me to deal with ambiguity and delay.					
26. Evaluates the potential impact of proposed changes.					
27. Helps me to see the positive aspects of new changes in and outside organization.					
28. Utilizes my skills, knowledge and willingness to innovate changes.					
29. Encourages me to exhibit risk-taking behaviors and act proactively.					
30. Builds coalitions and networks among peers and department.					
31. Nurtures contacts with people external to the organization.					
32. Presents ideas to managers at higher levels; represents the unit to others in the organization; exerts lateral and upward influence in the organization.					
33. Represents the unit to clients and customers.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
34. Demonstrates the quality of a skilled communicator and listener.					
35. Maintains a high level of energy in motivating employees to reach productive accomplishment.					
36. Creates high performance expectations in others, focusing on results.					
37. Emphasizes the completion of the group's task as a priority.					
38. Makes sure the work group sets clear goals, makes plans, and establishes milestones for the projects he/or she leads.					
39. Assigns clear priorities among multiple goals.					
40. Sets a context of the work to be done and the outcomes to be achieved.					
41. Reallocates resources to accommodate necessary changes in workflow.					
42. Makes sure work activities are carried out with a minimum amount of conflict among individuals, work teams, or work units.					
43. Sets up and maintains necessary communication channels through unit / department.					
44. Organizes information into a form that leads to effective decision-making.					

Question	not at all	once in a while	sometimes	fairly often	frequently, if not always
45. Disseminates information regarding changes in policies and procedures.					
46. Supervises team members complying with rules and meeting requirements.					

องค์กรแห่งการเรียนรู้

แบบสอบถามนี้ใช้เพื่อสอบถามความคิดเห็นที่ท่านมีต่อระบบย่อยในองค์กรของท่าน
โปรดอ่านและพิจารณาประโยคดังต่อไปนี้และทำเครื่องหมาย "√" ในช่องคำตอบที่ตรงกับความคิดเห็นของท่านเกี่ยวกับความเป็นจริงในปัจจุบันในองค์กรของท่าน

ก. การสร้างวิสัยทัศน์/พันธกิจร่วมและกลยุทธ์ขององค์กร	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
1. องค์กรของท่านมีการกำหนดวิสัยทัศน์และพันธกิจอย่างชัดเจน และมีการปรับเปลี่ยนให้ทันสมัยตามความเหมาะสม					
2. ทีมนำหรือหัวหน้าหน่วยงานเข้าร่วมและมีโอกาสออกความคิดเห็นเกี่ยวกับวิสัยทัศน์/พันธกิจที่ควรจะเป็นขององค์กร					
3. องค์กรของท่านมีการกำหนดแผนปฏิบัติการเพื่อพัฒนาขีดความสามารถในการพัฒนาของบุคลากรจากที่เป็นอยู่ปัจจุบันให้เหมาะสมกับวิสัยทัศน์/พันธกิจขององค์กร					
4. บุคลากรมีโอกาสเข้าร่วมในการกำหนดความมุ่งหมาย (เจตจำนง) ในระดับแผนก/หอผู้ป่วย/ฝ่าย					
5. บุคลากรในองค์กรเข้าใจความมุ่งหมายของวิสัยทัศน์/พันธกิจเป็นอย่างดี และสามารถนำไปปรับใช้เป็นแนวทางในการวางแผนดำเนินงาน และการกำหนดกลวิธี กระบวนการ กิจกรรมและการตัดสินใจในการทำงานประจำวันได้					
6. บุคลากรมีความมุ่งมั่นต่อวิสัยทัศน์/พันธกิจขององค์กรและมีความกระตือรือร้นที่จะธำรงรักษากระบวนการและดำเนินการให้บรรลุผลสำเร็จ					
7. บุคลากรเต็มใจรับผิดชอบและใช้ความพยายามเพิ่มขึ้นในการจัดทำแผนกลยุทธ์หรือปฏิบัติการโดยสอดคล้องกับวิสัยทัศน์/พันธกิจขององค์กร					
8. บุคลากรในองค์กรเชื่อว่าแผนการพัฒนาคุณภาพอย่างต่อเนื่องทำให้องค์กรนี้เหนือกว่าองค์กรคู่แข่ง รวมทั้งผลลัพธ์เชิงธุรกิจและด้านการบริหารจัดการ					

โครงสร้างองค์กรและงาน	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
9. แผนกต่างๆใช้ทีมคร่อมสายงานในการทำงานเพื่อให้บรรลุผลสาเร็จในการเพิ่มคุณภาพการบริการของผู้ป่วย					
10. หน่วยพื้นฐานขององค์กรคือ การร่วมกันทำงานเป็นทีม					
11. ในองค์กรของท่านใช้ระบบการทำงานเป็นทีมแบบปกครองกันเอง ที่รับผิดชอบงานตั้งแต่ต้นจนจบกระบวนการ					
12. มีการหมุนเวียนงาน การมอบหมายงานเฉพาะกิจ และ/หรือการฝึกอบรมระหว่างแผนก (การฝึกอบรมเพื่อทำงานอื่น) นั้นมีขึ้นเพื่อให้เกิดความหยืดหยุ่นในด้านกำลังคน					
13. บุคลากรปรับเปลี่ยนกระบวนการทำงานอยู่เสมอ เพื่อให้สอดคล้องกับสถานการณ์ที่เปลี่ยนแปลง และเพื่อให้สามารถตอบสนองต่อความต้องการของลูกค้าภายในหรือภายนอกได้					
ค. การถ่ายทอดข่าวสารและการสื่อสาร	**มากที่สุด**	**มาก**	**ปานกลาง**	**น้อย**	**น้อยที่สุด**
14. องค์กรของท่านนำเอาเทคโนโลยีสารสนเทศขั้นสูงมาใช้ในการพัฒนาการเผยแพร่ข้อมูลข่าวสาร และการสื่อสารระหว่างกัน (เช่น การใช้เครือข่ายคอมพิวเตอร์ อินทราเน็ต เว็บบอร์ด รวมทั้ง Tele-Conference)					
15. มีการส่งเสริมให้บุคลากรแลกเปลี่ยนข้อมูลข่าวสารทั้งองค์กรเกี่ยวกับวิธีการปรับปรุงแผนก และ / หรือ องค์กรให้ดีขึ้นผ่านวิธีดำเนินการที่เป็นทางการ (เช่น การประชุมระดับแผนก นิตยสารในองค์กร และจดหมายข่าว)					
16. องค์กรของท่านเผยแพร่สิ่งที่ได้เรียนรู้จากประสบการณ์และผลการแก้ไขปัญหาให้ทราบทั่วกันทั้งองค์กร โดยผ่านสื่อต่างๆ เช่น ระบบบันทึกข้อความ ระบบการให้คำแนะนำ อีเมล์ ป้ายโปสเตอร์ การนำเสนอ					
17. บุคลากรได้รับข้อมูลข่าวสารที่ทันสมัย และสามารถเข้าถึงข้อมูลข่าวสารเกี่ยวกับองค์กรได้อย่างสะดวก					
18. บุคลากรแต่ละคนได้รับข้อมูลข่าวสารและการสนับสนุนที่เพียงพอสำหรับการปฏิบัติหน้าที่ที่ดี					
19. หากบุคลากรต้องการข้อมูลข่าวสารเพื่อการทำงาน บุคลากรท่านนั้นจะทราบว่าสามารถไปขอข้อมูลข่าวสารที่ต้องการได้จากที่ใดและจากบุคคลใด					

ง. วิธีปฏิบัติของแต่ละบุคคลและวิธีปฏิบัติของทีมงาน	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
20. บุคลากรและทีมงานมีความรับผิดชอบในการพัฒนาตนเอง ในการปรับปรุงทักษะให้ทันสมัย และในการเรียนรู้กระบวนการใหม่ๆ					
21. การเปลี่ยนแปลงที่ทีมงานพัฒนาคุณภาพเป็นผู้นำเสนอแนะ ถือเป็นสิ่งที่ได้รับการต้อนรับ และยอมรับ นำมาเป็นแนวทางในการสร้างมาตรฐานใหม่สำหรับการปฏิบัติงานของบุคลากร					
22. บุคลากรแต่ละคนช่วยเหลือซึ่งกันและกันโดยไม่ต้องบอกกล่าว แม้ว่าภารกิจนั้นไม่ได้เป็นส่วนหนึ่งของหน้าที่ตามปกติของตน					
23. ในสถานการณ์ที่เกิดความขัดแย้ง จะหลีกเลี่ยงการตำหนิ เพื่อให้ทุกคนสามารถอภิปรายประเด็นปัญหาได้อย่างเปิดเผย และตรงไปตรงมา แล้วหาทางแก้ไขปัญหานั้นๆ					
24. มีการส่งเสริมให้บุคลากรและทีมงาน สามารถวิเคราะห์หาปัญหาและข้อผิดพลาดเพื่อนำไปสู่การเรียนรู้และทำให้ดีขึ้นได้ในครั้งต่อไป					
จ. กระบวนการทำงาน	**มากที่สุด**	**มาก**	**ปานกลาง**	**น้อย**	**น้อยที่สุด**
25. บุคลากรและทีมงานรับทราบถึงปัญหาและประเด็นที่เกี่ยวข้องกับการทำงานร่วมกัน และใช้วิธีการแก้ไขปัญหาอย่าง สร้างสรรค์					
26. ในการทำงานให้สำเร็จลุล่วงจะใช้หลักการทำงานแบบสหวิชาชีพและแบบคร่อมสายงาน					
27. แผนกต่างๆ / หอผู้ป่วยเปิดให้บุคคลอื่นได้รับการเรียนรู้จากข้อผิดพลาดและความสำเร็จของตน					
28. บุคลากรใช้แนวคิดใหม่ๆที่ได้จากการค้นคว้าอย่างเป็นระบบ นำมาประยุกต์ใช้ให้เหมาะสมกับงานของตนเองอยู่เป็นประจำ					
29. บุคลากรในทีมงานมีจิตใจที่เปิดกว้าง อดทนต่อมุมมองที่แตกต่าง เต็มใจที่จะทดลองใช้วิธีการปฏิสัมพันธ์วิธีใหม่ๆ และยอมรับการเปลี่ยนแปลง					
30. บุคลากรมีส่วนร่วมในการตัดสินใจร่วมกันเมื่อได้รับผลกระทบจากปัญหาต่างๆในการทำงาน					

ฉ. การหาความรู้ การเผยแพร่ความรู้ และการใช้ประโยชน์จากความรู้	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
31. บุคลากรเสาะแสวงหาความรู้อย่างจริงจังทั้งจากภายในและภายนอกองค์กร โดยศึกษาจากสิ่งที่ผู้อื่นปฏิบัติเพื่อนำมาพัฒนางานขององค์กร (เช่น Bench marking, Best practices การเข้าร่วมการประชุม)					
32. การแลกเปลี่ยนความรู้ระหว่างกันในองค์กร ถือว่าเป็นส่วนหนึ่งของบทบาทความรับผิดชอบและหน้าที่ของบุคลากรทุกคน					
33. องค์กรของท่านจัดทำระบบความรู้ (เช่น การจัดตั้งศูนย์สารสนเทศประจำองค์กร การสร้างฐานข้อมูล) และจัดเตรียมให้ผู้ที่ต้องการหาความรู้สามารถใช้งานได้					
34. บุคลากรทุกคนใช้กลุ่มที่เป็นและไม่เป็นทางการที่มีบทบาท ความรับผิดชอบ ความสามารถ และ/หรือความสนใจคล้ายตนเองในการแลกเปลี่ยนความรู้ซึ่งกันและกัน					
35. บุคลากรทราบถึงความต้องการและความคาดหวังของลูกค้า (ผู้ป่วย) ซึ่งนำมาใช้ในการกำหนดคุณภาพของการบริการ รวมทั้งนำมาใช้ในการให้บริการที่มีคุณภาพและสอดคล้องกับมาตรฐานทางวิชาชีพ					
36. ความรู้ใหม่ที่รับจากกระบวนการพัฒนาคุณภาพอย่างต่อเนื่อง ทำให้เพิ่มทักษะของบุคลากรทางด้านคลินิกบริการ สนับสนุนคลินิกบริการ ความร่วมมือ การจัดสรรทรัพยากร การเข้าร่วมกิจกรรมใหม่ๆ					
37. การเผยแพร่และการแลกเปลี่ยนความรู้ซึ่งกันและกันภายในองค์กรถูกนำมาใช้ในการพัฒนาความสามารถของบุคลากร ทำให้องค์กรมีศักยภาพในการแข่งขันสูงขึ้น					
ช. เป้าหมายด้านประสิทธิภาพการทำงานและผลสะท้อน	**มากที่สุด**	**มาก**	**ปานกลาง**	**น้อย**	**น้อยที่สุด**
38. องค์กรคำนึงถึงความพึงพอใจของลูกค้า (ผู้ป่วย) และถือเป็นส่วนหนึ่งที่สำคัญในการประเมินผลการปฏิบัติงานของบุคลากร					
39. องค์กรของท่านมีวิธีการที่เป็นระบบและเชื่อถือได้ในการประเมินระดับการพัฒนาประสิทธิภาพการทำงาน					
40. การให้และการรับฟังผลสะท้อนกลับถือเป็นเรื่องปกติสำหรับบุคลากรและทีมงาน ซึ่งเป็นส่วนหนึ่งของบทบาทหน้าที่ กล่าวคือบุคลากรมีความเข้าใจซึ่งกันและกัน					
41. องค์กรของท่านยอมรับการประเมินความสามารถในการทำงานร่วมกันของบุคลากรของทีมงาน					
42. มีการปรับเป้าหมายประสิทธิภาพการทำงานของแต่ละบุคคลให้สอดคล้องกับเป้าหมายกลยุทธ์ขององค์กรอย่างชัดเจน					

ช. การฝึกอบรมและการให้การศึกษา	มากที่สุด	มาก	ปานกลาง	น้อย	น้อยที่สุด
43. บุคลากรมีแรงจูงใจอย่างแรงกล้าที่จะเรียนรู้ทักษะใหม่ๆและมีโอกาสเข้ารับการฝึกอบรมในเรื่องที่เกี่ยวข้องกับงานของตนและสอดคล้องกับความต้องการของหน่วยงาน					
44. บุคลากรได้รับการฝึกอบรมแบบคร่อมสายงานในหลายๆกิจกรรม เพื่อให้สามารถหมุนเวียนทำงานกับทีมงานอื่นๆได้					
45. มีการกำหนดจำนวนชั่วโมงการฝึกอบรมและการสัมมนาในแต่ละปีของบุคลากรแต่ละคนไว้อย่างชัดเจน					
46. โปรแกรมการศึกษามีความหมายรวมถึงการฝึกอบรมทักษะเรื่อง ‘‘การเรียนรู้วิธีการเรียนรู้" จากประสบการณ์จริงของตนเองและของผู้อื่น					
47. การฝึกอบรมและการให้การศึกษาในองค์กรนี้จัดให้มีขึ้นอย่างเป็นระบบในทุกระดับ					
ฌ. รางวัลและการชมเชย	**มากที่สุด**	**มาก**	**ปานกลาง**	**น้อย**	**น้อยที่สุด**
48.บุคลากรจะได้รับรางวัลและผลตอบแทนตามประสิทธิภาพการทำงานของตนและ/หรือประสิทธิภาพของทีมงานของตน ไม่ใช่ได้รับตามระดับอาวุโส					
49. หัวหน้ากลุ่มงาน / ฝ่าย / ผู้จัดการให้เวลากับการแสดงความชมเชยความพยายามของบุคลากรแต่ละคน (เช่น กล่าวขอบคุณ ด้วยวาจาหรือเป็นลายลักษณ์อักษร)					
50. ผลกำไรที่ได้รับจากการพัฒนาประสิทธิภาพขององค์กรได้ถูกจัดสรรและแบ่งปันอย่างเหมาะสมสำหรับบุคลากรทุกคน					
51. โดยทั่วไป องค์กรและทีมงานจะหลีกเลี่ยงการลงโทษเมื่อบุคลากรทำงานพัฒนาคุณภาพได้ผลรับไม่ตรงตามเป้าหมายที่กำหนด					
52. บุคลากรจะได้รับการยกย่องเมื่อสามารถแก้ไขปัญหาการทำงานและกล้าที่จะเผชิญกับอุปสรรคได้อย่างสำเร็จลุล่วง					
ญ. การพัฒนาของแต่ละบุคคลและทีมงาน	**มากที่สุด**	**มาก**	**ปานกลาง**	**น้อย**	**น้อยที่สุด**
53. ความรับผิดชอบต่อการเรียนรู้และการพัฒนาตนเองถือเป็นส่วนหนึ่งในการทำงานของบุคลากรทุกคน					
54. บุคลากรยอมรับที่จะมีการปรับเปลี่ยนแนวคิดและวิธีปฏิบัติแบบเดิมๆ โดยทดลองใช้วิธีที่แตกต่างออกไปในการทำงานและยอมรับที่จะปรับเปลี่ยนพฤติกรรมการทำงานของตนเอง					
55. บุคลากรในองค์กรมีการศึกษาอย่างสม่ำเสมอเกี่ยวกับความต้องการของลูกค้า (ผู้ป่วย) และค้นหาวิธีการที่จะตอบสนองความต้องการนั้นๆ					
56 ทีมงานได้รับความช่วยเหลืออย่างเหมาะสม เพื่อการพัฒนา (เช่น การอำนวยความสะดวกด้านกระบวนการ การสนับสนุนในการจัดตั้งทีมงาน)					
57. ทีมงานและผู้รับผิดชอบประจำโครงการระยะยาวมีการกำหนดระยะเวลาและหัวข้อในการเรียนรู้อย่างชัดเจน					

Questionnaire: Learning Organization

Questionnaire ask your opinions about subsystems in your organization

Please consider the following sentences and put "x" in an appropriate box that corresponds to your opinion about the current reality of your organization.

A. Building shared vision and organizational strategy	**Very much**	**Much**	**Moderate**	**Little**	**Least**
1. Our organization articulates a clear vision and mission statement and updates it as appropriate.					
2. The steering team participates in group meetings and has an opportunity to speak about what the organizational vision should be.					
3. Our organization formulates organizational plans of action for development of the potential capability of employees from present reality toward its vision.					
4. We have an opportunity to participate in the development of the mission statement in department meetings.					
5. We have a good understanding and can adopt organizational vision principles to guide our actions and decisions into day-to-day activities.					
6. We actively maintain and commit to the organizational vision about what is to be done and how it will be accomplished					
7. We have a willingness to take responsibility and put an extra effort to develop strategic planning that supports the organizational vision.					

A. Building shared vision and organizational strategy	Very much	Much	Moderate	Little	Least
8. We believe in continuous improvement planning to make this organization better than its competitors including business outcomes and administrative management.					
B. Organizational and Job Structure	**Very much**	**Much**	**Moderate**	**Little**	**Least**
9. Cross-functional and interdepartmental meetings occur frequently in our organization.					
10. The basic organizational unit is teamwork.					
11. We utilize self-directed work teams that have responsibility for work processes from start to finish.					
12. Job rotation, ad hoc assignments, and/or cross-training (for other jobs) are used to build work-force flexibility.					
13. We routinely modify work processes in response to changing circumstances to satisfy an internal or external customer's need.					
C. Information Flow and Communication	**Very much**	**Much**	**Moderate**	**Little**	**Least**
14. Our organization integrates the use of advanced information technology to improve the information flow and to enhance our communication with one other (for example computer network , Intranet, Web board)					
15. We are encouraged to share information across organization boundaries about how to improve department / organization through formal procedures (for example, department meetings, in-house magazine, and newsletter).					

C. Information Flow and Communication	**Very much**	**Much**	**Mode rate**	**Little**	**Leas t**
16. As our work groups or project teams solve organizational problems or create new approaches, we communicate our learning and results throughout the organization (through things such as suggestion system. memorandum, E-mail, poster, presentation)					
17. We receive up-to-date information as well as have easy access to organizational information to use for development purposes.					
18. Individuals have the information and support they need to do their jobs well.					
19. If individuals need information in order to do their job, they know where to go and get that information.					

D. Individual and Team Practices	Very much	Much	Moderate	Little	Least
20. Individuals and teams take responsibility for their own development, keep their skills up to date, and learn new processes.					
21. The changes offered by quality improvement teams are likely to be welcomed and everyone accepts it as the new standard for our performance.					
22. Individual members help one another without being told do so, even when the task is not part of their normal duties.					
23. In conflict situations, blaming is minimized so that everyone can openly and honestly discuss the issues and work towards a solution.					
24. Individuals and groups are encouraged to analyze mistakes in order to learn how to do it better the next time.					
E. Work Process	**Very much**	**Much**	**Moderate**	**Little**	**Least**
25. Problems and work-related issues are shared by members of each team to encourage a group problem-solving approach with creative thinking.					
26 Multi-disciplinary and cross-functional work groups are used to get jobs done.					
27 Most departments are open to others for learning from their mistakes as well as their successes.					
28. Our daily work is performed based on procedures for improvement, which are detailed and standardized (for example Protocol, CareMap, Clinical Pathway).					

E. Work Process	Very much	Much	Moderate	Little	Least
29. Team members utilize open-mindedness, tolerance of different perspectives, willingness to experience new modes of interaction, and acceptance of change.					
30. Decisions are made with the involvement of the employees affected by them.					
F. Knowledge Acquisition, Dissemination, and Utilization	**Very much**	**Much**	**Moderate**	**Little**	**Least**
31. We actively seek information from internal and external organizations by looking at what others do in order to improve the organizational work (for example Benchmarking, Best practices, and Attending conferences).					
32. Skills and knowledge resources are shared with other departments.					
33. Our organization has established a knowledge system (for example establishing an organizational information center, creating databases) and made it available to those who need and can use it.					
34. Formal and informal groups, in which members have common interest, similarity of responsibility and skill, are used for transferring knowledge to the entire organization.					

H. Performance Goals and Feedback	Very much	Much	Moderate	Little	Least
38. The satisfaction of our clients (patients) is considered in our performance reviews.					
39. We have reliable systematic methods to measure the improvement in our performance.					
40. Giving and receiving feedback are the norm for all team members and seen as part of their role-understanding of each other.					
41. Our organization acknowledges appraisal of the team members' ability to work together.					
42. Individuals' performance goals are clearly aligned with the organization's strategic goals.					
I. Training and Education	**Very much**	**Much**	**Moderate**	**Little**	**Least**
43. There are regular opportunities for employees to learn new skills and information related to their job and department / wards' needs.					
44. We are cross-trained for many activities so that we can be rotated to different teams.					
45. The number of training hours and annual seminars of each person are determined clearly.					
46. Educational programs include skill training on "learning how to learn" from one's experiences and from others.					
47. Education and training in this organization is carried out systematically at all levels.					

J. Rewards and Recognition	Very much	Much	Moderate	Little	Least
48. We are rewarded based on our performance and/or the performance of our team, not for seniority.					
49. Manager / department head takes the time to show appreciation for individual effort (For example saying thank you, verbally or in writing)					
50. Profit gains due to improvements in organizational performance are shared equitably with all employees.					
51. Punishment for failures is generally avoided when employees working for quality improvement are able to meet specified targets.					
52. We are recognized for being courageous and taking initiative, that is, for experimenting and taking appropriate chances.					
K. Individual and Team Development	**Very much**	**Much**	**Moderate**	**Little**	**Least**
53. Taking responsibility for our own learning and development is considered as a part of our jobs.					
54. We admit and are able to adjust our concept and old ways of practice by experiment / or learning something and systematically searching new knowledge.					
55. Everyone in the organization is constantly learning to determine what clients want and how to meet client needs.					
56 Teams are given appropriate assistance with their development (for example process facilitation, team building support).					
57. Work teams and long-term project teams have specific learning agendas.					

Questionnaire: Organizational Culture

Interested Person: Please contact

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APPENDIX B

Interview Guide Line

Organizational culture questions

1 Has the organizational culture of hospital's employees changed over time since they have participated in HA? How?

2 What characteristics of organizational culture were exhibited dominantly after participating HA?

3 What characteristics of organizational culture would you prefer to have in accredited and certified hospital? Why?

APPENDIX C

LISREL Command Files for LISREL data analysis and Goodness-of-fit Indexes

LISREL for Private Hospital: Learning organization model

SYSTEM FILE from file 'E:\job\Sirirat_ABAC\Spss\newpri.dsf'
Relationships
LO = OCE_S OCE_P OCE_R
OCE_A = TSCO_P TSPR_P
OCE_S = OCE_A
OCE_P = TFME_P TSMO_P OCE_R OCE_A
OCE_R = OCE_A OCE_S
LO = TFBR_P TFFA_P TSPR_P TSDI_P TSMO_P TFIN_P
!Path Diagram
Iterations = 250
Method of Estimation: Maximum Likelihood
Lisrel output mi EF SS SC
End of Problem

Goodness of Fit Statistics

Degrees of Freedom = 32
Minimum Fit Function Chi-Square = 36.96 (P = 0.25)
Normal Theory Weighted Least Squares Chi-Square = 35.22 (P = 0.32)
Estimated Non-centrality Parameter (NCP) = 3.22
90 Percent Confidence Interval for NCP = (0.0 ; 21.90)

Minimum Fit Function Value = 0.20
Population Discrepancy Function Value (F0) = 0.018
90 Percent Confidence Interval for F0 = (0.0 ; 0.12)
Root Mean Square Error of Approximation (RMSEA) = 0.024
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.061)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.85

Expected Cross-Validation Index (ECVI) = 0.85
90 Percent Confidence Interval for ECVI = (0.83 ; 0.95)
ECVI for Saturated Model = 1.01
ECVI for Independence Model = 21.35

Chi-Square for Independence Model with 78 Degrees of Freedom = 3837.81
Independence AIC = 3863.81
Model AIC = 153.22
Saturated AIC = 182.00
Independence CAIC = 3919.02
Model CAIC = 403.80
Saturated CAIC = 568.48

Normed Fit Index (NFI) = 0.99
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.41

Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 0.98

Critical N (CN) = 274.54

Root Mean Square Residual (RMR) = 0.0091
Standardized RMR = 0.022
Goodness of Fit Index (GFI) = 0.97
Adjusted Goodness of Fit Index (AGFI) = 0.92
Parsimony Goodness of Fit Index (PGFI) = 0.34

LISREL for Public Hospital: Learning organization model

SYSTEM FILE from file 'E:\job\Sirirat_ABAC\Spss\newgov.dsf'
Relationships
LO = OCE_A OCE_S OCE_P OCE_R
OCE_A = TFME_P TSPR_P TSDI_P TSCO_P
OCE_S = TSDI_P OCE_A TFFA_P
OCE_P = OCE_R OCE_A TFIN_P
OCE_R = TSMO_P OCE_A OCE_S TSDI_P
LO = TFBR_P TSPR_P TSDI_P
!Path Diagram
Iterations = 250
Method of Estimation: Maximum Likelihood
Lisrel output mi SS SC EF
End of Problem

Goodness of Fit Statistics

Degrees of Freedom = 29
Minimum Fit Function Chi-Square = 23.50 (P = 0.75)
Normal Theory Weighted Least Squares Chi-Square = 23.24 (P = 0.77)
Estimated Non-centrality Parameter (NCP) = 0.0
90 Percent Confidence Interval for NCP = (0.0 ; 8.59)

Minimum Fit Function Value = 0.073
Population Discrepancy Function Value (F0) = 0.0
90 Percent Confidence Interval for F0 = (0.0 ; 0.028)
Root Mean Square Error of Approximation (RMSEA) = 0.0
90 Percent Confidence Interval for RMSEA = (0.0 ; 0.031)
P-Value for Test of Close Fit (RMSEA < 0.05) = 1.00

Expected Cross-Validation Index (ECVI) = 0.49
90 Percent Confidence Interval for ECVI = (0.49 ; 0.52)
ECVI for Saturated Model = 0.58
ECVI for Independence Model = 20.15

Chi-Square for Independence Model with 78 Degrees of Freedom = 6262.32
Independence AIC = 6288.32
Model AIC = 147.24
Saturated AIC = 182.00
Independence CAIC = 6350.35
Model CAIC = 443.07
Saturated CAIC = 616.20

Normed Fit Index (NFI) = 1.00
Non-Normed Fit Index (NNFI) = 1.00
Parsimony Normed Fit Index (PNFI) = 0.37
Comparative Fit Index (CFI) = 1.00
Incremental Fit Index (IFI) = 1.00
Relative Fit Index (RFI) = 0.99

Critical N (CN) = 676.32

Root Mean Square Residual (RMR) = 0.0054
Standardized RMR = 0.012
Goodness of Fit Index (GFI) = 0.99
Adjusted Goodness of Fit Index (AGFI) = 0.97
Parsimony Goodness of Fit Index (PGFI) = 0.32

BIOGRAPHY

NAME	Sirirat Chamnannarongsak
BACKDROUND ACADEMIC	MSN (Adult Health: Educator Role) Catholic University of America, Washington, DC. USA, (1992 - 1994)
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